FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

VOLUME 1, NUMBER 1, FALL 1965

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

UNIVERSITY OF ILLINOIS, URBANA

v. 1

A Note from the Editor

A review of the development of modern accountancy immediately engages one with a great variety of national environments and geographical locations — in brief, the development of accountancy has been centrally marked by its international character. The rudimentary but important record-keeping attempts of the Chaldeans, the efforts of Roman account-keepers, the splendid breakthrough crystalized in double-entry bookkeeping in the Italian city-states of the fourteenth century, the evangelistic role of the Hanseatic traders, and the significant accounting achievements of the British are all indicators of the multi-national heritage of accountancy. The more recent innovations in the theoretical and practical aspects of accounting of the present century have continued this earlier pattern. The intricacies of modern international financial transactions, the measurement of economic success of international companies, the listing problems of truly international stock exchanges, and the attempts at macromeasurements are all indicative of the degree of international involvement of accounting that now exists. In summary, accountancy — with its varied national origins and present influences — well deserves to be called a "universal art."

In the present-day setting, with the oft-repeated calls for international awareness and understanding, it is indeed surprising, and lamentable, that this "universal art" of accounting has had such a limited international forum. And with the current conviction so often expressed that this universal art can serve as an effective agent in international commerce and understanding, the present lack of an adequate international exchange of accounting ideas is the more deplorable. The province and the concern of accounting are not welded to any particular economic system or national geographic unity. The recent "rediscovery" of the necessity of accounting techniques for an orderly economic program by certain Eastern European countries quite effectively

demolishes the fiction that accounting is useful only in a certain type of economic society.

The International Journal of Accounting *Education and Research* is designed to make available a new international forum for the effective study and appreciation of accounting. Within its covers will be presented for international examination and deliberation the important thoughts and conclusions of outstanding accounting scholars, such as Käfer of Switzerland, Kosiol of Germany, Katano of Japan, and Littleton of the United States of America. The international applications of accounting, not the national origins of the authors, will be emphasized.

The general purpose of **The International Journal of Accounting** *Education and Research* is to explore and identify the international dimension of accounting as it exists today. The specific manner in which the issues of the **Journal** attempt to accomplish this will remain flexible. Proceedings of special seminars, reports of research, and individual articles will be included. The articles in this inaugural issue are based on papers presented at a recent seminar on international accounting held at the University of Illinois.

The International Journal of Accounting *Education and Research* is supported by the resources of the Center for International Education and Research in Accounting of the University of Illinois. Although administratively related to this Center and indebted to certain individuals (notably Dean Paul M. Green and Professor C. A. Moyer) for its inception and support, the **Journal** will not attempt to serve a particular institution but rather will aim to advance an interest in and the understanding and application of accounting in all of its international dimensions. To this end we invite the interest and assistance of all those concerned with this vital and lively area of accounting emphasis.

V. K. ZIMMERMAN, *Editor*

Urbana, Illinois
Fall, 1965

Contents

CONTEMPORARY PROBLEMS AND OPPORTUNITIES IN THE PRACTICE OF INTERNATIONAL ACCOUNTING

United States Accounting as Viewed by Accountants of Other Countries

THEODORE L. WILKINSON*

My father was a Rough Rider, fought under Theodore Roosevelt, and liked Cuba so well that he decided some day he would return and take up residence there, which he did shortly after I was born. I was brought up in Havana — this was before Castro of course — and I studied accounting at the University of Havana. I also resided for several years in Bogotá, Colombia, and I have done work in several other countries in Europe and the Far East. This has given me a good opportunity to appreciate how we look to others, not only as people but also as professional men.

To see ourselves as others see us is always a salutary and enlightening experience. So let us listen to some comments we might well receive from accountants in other countries. These comments are imaginary, of course, but they sum up reactions to certain of our practices that puzzle people from abroad.

HOW U.S. RULES AND REGULATIONS LOOK TO ACCOUNTANTS FROM ABROAD

The U.S. is supposed to be the land of the free, but you U.S. accountants seem to be highly regulated. You have Accounting Research Bulletins, Statements on Auditing Procedures, Opinions of the Accounting Principles Board, Terminology Bulletins, Accounting Series

---

* Theodore L. Wilkinson is a partner of the international public accounting firm, Price, Waterhouse and Company. He served as Chairman of the VI Inter-American Accounting Conference held in New York in September, 1962. He has published numerous papers in the area of international taxation, auditing, accounting, and finance.

Releases, Securities and Exchange Commission (SEC) Acts of 1933-34, requirements of the Interstate Commerce Commission (ICC), stock-exchange listing requirements, blue-sky state laws, and income tax laws.

On the other hand, in spite of all of those regulations, you do not seem to know precisely what you mean when you use the term "generally accepted accounting principles." Perhaps you need still more codification.

EFFECT OF TAX LAWS ON U.S. ACCOUNTING

Your income tax laws have a serious effect on your accounting, not quite to the same extent as in some other countries, but their impact is increasing. Your recently issued proposed regulation on earnings and profits of controlled foreign corporations has gone so far as to dictate to us how U.S. subsidiary companies in our country should keep their accounts so you can pay your proper taxes.

Whenever you make an entry on your books in a period before or after the period in which an item is deductible for tax purposes, you use what you call "tax effect accounting," to avoid distorting income, you say. This appears to us to be "income levelling," and we are experts at it. With our extreme conservatism, which we have learned to be the only safe policy over cycles of booms and depressions, we have so many reserves that we can do a far better job of income levelling than you can. We can avoid income distortions almost completely. We used to call these reserves "hidden" reserves, but the trend now is toward not hiding them. They are disclosed. Everyone knows what we are doing when we make this year's income turn out to be the same as last year's. We are expected to do this.

Your proposed income-tax regulations covering controlled foreign corporations contain some very complicated procedures for translating accounts of foreign companies into U.S. dollars for purposes of taxation. This is a field that has been completely neglected by your American Institute of Certified Public Accountants (AICPA) in spite of the tremendous growth in investments abroad by American companies in recent years. Some companies earn more than half their income through foreign operations, yet your accountants still work with some outmoded rules of thumb for foreign currency translations. These rules were useful because of their simplicity thirty years ago, when foreign operations could be considered immaterial and when foreign exchange fluctuations were not so severe, but today they are rather archaic.

A sub-committee of the Institute is working on this. It is too bad

the report did not come out before the tax regulations were proposed. Now the Treasury is going to make some rules for you since you did not get around to making them for yourselves.

WHAT ABOUT PRICE LEVEL CHANGES?

In many countries inflation has taken place to such a degree that we have been forced to make adjustments to provide meaningful accounts and to obtain reasonable deductions for income tax purposes. You excuse your inaction in this area by explaining that you do not have inflation to the same degree. Your currency has depreciated only 50 percent since the war, and you spent so much time discussing what you were going to do about it that before you arrived at a satisfactory solution your country's rate of inflation had levelled off to only one or two percent per year. You decided that the need was no longer pressing. Except for a few make-shift ideas such as LIFO (last-in, first-out inventory pricing method) — which you really do not like, but which is too attractive from a tax point of view to resist — and accelerated depreciation, you found no practical solution. Apparently, you prefer to wait until events force you to make a decision.

It is clear, however, that the need was great and you should have found a solution to the price-level problem. Why did the usually ingenious American mind fail in this case? Perhaps it is because your accounting theory is dominated by men who are not just accountants, but who are principally auditors. The accountant in your country does not have a chance, because the auditor in him takes over and squelches any good accounting ideas that might cause the auditing task to be more difficult.

You wear two coats, one as an auditor, the other as an accountant. Current dollar accounting was rejected because the auditor was not quite sure he could approve the indexes that might be used. In solving accounting problems you should wear only your accounting coat. You should decide on what is the best accounting, and let the auditors worry about how to check up on the proposed methods. Electronic data processing was not discarded because it made the auditor's job more difficult; the auditors just had to find a way to audit the work of these machines.

STOCK DIVIDENDS — A PHANTOM ENTRY

In your accounting for stock dividends, you always insist on making a phony entry, one that you admit has no basis in accounting logic, and really has nothing to do with the affairs of the company. You give

reasons such as the need to protect the uninformed stockholder from himself. This seems far afield from pure accounting. The only cure for an uneducated stockholder is education. We will never be able to understand this type of entry. You are misleading your stockholders by implying that these additional pieces of paper have market value, and that they can sell them and still be as well off as before. In Spanish there is a word for this — "contraproducente" — which means having just the opposite result from that which you intended.

WHAT SEC REQUIREMENTS MEAN TO US

When we come into your country to issue securities, we are amazed at the amount of detailed information that the SEC requires us to provide. We admire your practices in the way of full disclosure, and we can understand that after the 1929 crash a need was felt for more information for investors, but we wonder whether you may have overdone it. Is it really true that the uneducated stockholder, who is in need of the stock-dividend type of protection, is educated enough to read and understand this mass of data for each security in which he invests? Maybe he reads the prospectus and looks at the earnings per share, but who is the other material for? Does anyone other than a security analyst use it for investment decisions, or is it mainly used by competing companies seeking information? Over-disclosure is just as bad as under-disclosure. You can mislead a stockholder just as much by giving him too much information to digest as you can by giving him too little. When was the last time a study was made towards reducing the volume of information to be filed?

If stockholder's reports are now to include funds statements, can the fixed asset and depreciation schedules be deleted from the SEC requirements? Does a prudent investor look at Schedule XVI (Supplementary Profit and Loss Information)? Would it be possible to eliminate listings of depreciation rates, breakdowns of payables, and reduce the detail of pension and stock option information?

There is currently under consideration by the SEC a proposal that your annual reports to stockholders conform more closely to the SEC report. Your printed annual reports already look like models of perfection to us outside the U.S., and no other country approaches either the completeness or timeliness of these reports. You give a considerable amount of information. These reports get better every year. They seem to have served your stockholders well over the years. Certainly it is a good idea to have the two types of reports in close agreement,

but you should not, in the process, jeopardize the progress you have made. For example, annual reports may be deliberately delayed by the cautious legal departments, so they can be issued simultaneously with or later than the SEC reports, just to make sure they are in agreement.

While the SEC is busy with its regulations, it ought to prepare a codification of the Accounting Series Releases. Accountants are charged with knowing the contents of these releases, but they are not in very usable form. The AICPA regularly codifies its Bulletins, placing the material in more logical order and eliminating out-dated matter. The SEC should do the same. The Releases would be much easier to understand.

TRANSLATION OF FOREIGN CURRENCY ACCOUNTS

Americans do not seem to know much about foreign exchange and the translation of accounts. Interest in these subjects is limited to a very few U.S. accountants, it seems. Europeans are brought up in an atmosphere of foreign exchange. Not only do they speak several languages from an early age, but they learn how to translate the currency of one country into that of another. They know about arbitrage; they learn to predict when the currency of a country is going to be under pressure of possible devaluation, and they can take the necessary steps to protect themselves. At the same time that they learn accounting they learn how to translate accounts or, even better, how to understand them in their original currency. They know the corrosive effects of inflation, whether it is a little inflation or a lot. U.S. accountants, except for a few, seem to be deficient in this type of education. They seem to feel that it belongs in the sphere of the economist.

You rejected current dollar accounting as a solution to the problems of inflation, partly because you were suspicious of the indexes to be used. You have permitted the inclusion of accounts translated from foreign currencies in consolidations, however, using as indexes the exchange rates applicable to cash transfers or payments for imported merchandise at a particular date. You use these rates as if they actually represented the purchasing power of the foreign currency at the time.

In most financial statement translations, there are generally two types of rates involved: the current rate for financial assets, and the rate at the time of acquisition for physical assets. This theory assumes that the relative purchasing power of the foreign currency is measured by its quotation on the foreign exchange market. It assumes that if

the exchange rate goes down, the comparative cost of living goes up, immediately and in the same proportion. Anyone who has lived in several countries knows that this is not so. Only the cost of imported items is immediately affected. The cost of the locally-purchased items and of local labor goes up only as a result of internal inflation. There is considerable interrelationship, but no direct cause and effect as the foreign currency translation theory assumes. You can have internal inflation first, as presently in Brazil, resulting in currency devaluation on the exchange market later. You can have devaluation first, as in Venezuela, with little or no inflation within the country, except for imported items. The same translation procedure is used for the currencies of both countries and it is wrong for at least one, probably both.

The point is not easy to explain. Let us say that the Colombian peso is worth ten cents on the exchange market, but it is worth, say, twelve cents in purchasing power to whoever is spending it. When your local subsidiary invests a peso in a fixed asset, it is thereafter accounted for at ten cents, with no questions asked; but if your subsidiary really gave up twelve cents of purchasing power, why should not that acquired asset be translated as having cost twelve cents?

Translation procedures were devised at a time when countries were on the gold standard and exchange rate changes came about because of inflation. Nowadays, exchange rate changes arise through improper management of the balance of payments, and we still treat them as if they were solely the result of inflation.

Some say that rather than continue to mislead investors by assuming to be able to translate foreign currency statements into dollars with this degree of apparent accuracy, one should never translate the figures in the foreign company statements, only the words. One should submit them in English if he likes, but in their original currency, thereby putting the reader on notice that if he really wants to understand the statements he had better learn something about the purchasing power of that currency. SAS, the Scandinavian Airlines, does this. The report is translated into English but the figures are in Swedish currency.

This procedure is also followed by other companies abroad (which are not subsidiaries of U.S. companies, but parent companies in their own right) who have U.S. stockholders. Japanese companies who have American Depository Receipts (ADR) in your country present their accounts in their own currency. For ease in reading, and for this purpose only, they place beside the yen amounts the equivalents in U.S. dollars, but they use one and the same rate of exchange for every

figure in the report. No historical rates are used and there is no representation that the dollars mean anything or that they are the official currency of the company. The company is a yen company, makes its earnings in yen, suffers its costs in yen, and pays its dividends in yen.

L. M. Ericsson is another case. Here the stockholder can expect his dividends to be in Swedish Crowns, and he is reminded of that fact on every page of the financial report, even though memorandum translations to U.S. dollars (at a single rate) were made for him so he would not have to do them himself.

Perhaps you are wrong to translate foreign currency figures in your accounts. You learned long ago that you should not add together two apples and six avocado pears. Yet you apply an arbitrary exchange rate of say two avocados to one apple and come up with a total of five apples. This will not do. Tell the stockholder how many avocados he owns and how many apples, but do not add them together for him. This he will have to do for himself. He must select his own rate of exchange, at his own risk of being wrong. And this is the way it will have to be until such time as there exists a single world currency.

POOLINGS OF INTERESTS — AN AMERICAN INVENTION

What is this American invention, "pooling of interests"? This is a theory that mergers beget poolings and purchases beget takeovers. Your experience over the past few years has been most interesting for an outsider to observe. At first it was limited to companies of equal size whose stockholders had joined together and pretended that they had been so wedded all their lives, even to the extent of showing premarital dividends. Then the acquired company began to be smaller and smaller; now the relative size is carefully measured and justified in tenths of one percent. At first the stockholders had to promise to retain the stock resulting from the pooling; then the barriers were lowered because some of the stockholders had to pay taxes on the transaction (in other countries) and did not have the cash; so they were permitted to sell off up to 5 percent, then up to 10 percent and currently up to 20 percent, with the transaction still being considered a pooling. At first the payment had to be entirely in stock; now a portion can be paid in cash. First the managements had to be merged into joint managements or boards. Now, when small companies are being acquired by giants, service by officers of the smaller companies on divisional committees of the combined companies is deemed sufficient to provide continuity of management. At first the companies had

to merge together into one; now one of the companies is permitted to survive as a subsidiary. At first you could only pool two corporations; then you could pool a corporation with a partnership; now you can pool with a proprietorship. We even heard of a proposal that a corporation be merged with a dead man. It fell through for other reasons, but it probably would have been approved. This man had owned the company but had had it run by an employed professional manager. The owner's two sons, who were to inherit the business, were playboys, had never had anything to do with the business, and didn't want to. The continuation in his position of the hired manager after the merger, along with some addition of duties with respect to other similar businesses of the group proposing to acquire the business, would have provided the necessary continuity of management to satisfy the pooling requirements. Soon you will decide that pooling is permitted whenever stock is exchanged for stock, and there will be no other requirements.

DEPRECIATION AND CASH FLOW

You Americans perfected the theory of depreciation as the spreading of cost on a systematic basis over the estimated life of an asset. You abandoned the practice prevalent in the early part of this century of declaring depreciation provisions at the end of each year like dividends, depending on the amount of profits available. After all that good work you now have devised a figure called "cash flow." You report it carefully and you place great emphasis on it, thus proving to us that you really do not believe in your theory of depreciation after all. You say, "Here is what our profits really were after reversing that silly depreciation entry."

AICPA WORLD ACCOUNTING STUDY

In spite of all these peculiarities of your accounting, you assume the right to call it "generally accepted." We do not accept it, but we cannot afford to be too critical because you can readily turn the tables on us by inquiring more closely into our own country's accounting principles.

As a matter of fact, your AICPA's Committee on International Relations is doing just that. It will soon publish a book covering the differences in accounting principles between the United States and about twenty-five other countries.[1] It does not purport to be a complete

[1] The American Institute of CPA's has now published this book, *Professional Accounting in 25 Countries,* New York, 1965.

description of the accounting principles of any of the countries. It merely points out or highlights the differences between that country's principles and those of the United States. This book is in part a reply to the pleas for uniformity of accounting throughout the world that have been heard at almost every one of the more recently held International Congresses on Accounting. It is only a small step, based on the premise that in order to achieve any progress towards uniformity, we have first to make a list of the differences and the reasons why they exist. When two countries have different principles and want to resolve the difference, one of them has to change, or both of them have to change to a third principle.

Assuming complete good faith, and the power to make a change, they will have no way of deciding which one to choose, until after a rather thorough investigation into the history of the particular principle, how it arose and whether or not local conditions make it indispensable.

WHAT ARE THE PROSPECTS FOR WORLD UNIFORMITY?

About the best that we can expect is that each country will recognize the other countries' justification for its principles and that financial statements destined for use in another country will be prepared on the basis of the principles of the country of use rather than of the country of origin. This means that you must accept the idea that one company can put out more than one set of financial statements.

This view does not have the support of many U.S. accountants. Their feeling is that we must work towards the ultimate goal of having each company present only one set of accounts for all investors, of whatever nationality. In the interim period, however, the U.S. should be willing to accept accounts prepared abroad in accordance with principles that differ because of differing circumstances. You can disregard inflation because it is not of major importance in the U.S. You should not, however, reject inflation adjustments made by countries where inflation is an important factor.

HOW ACCOUNTING PRINCIPLES MOVE FROM ONE COUNTRY TO ANOTHER

The accounting principles of one country have never been "sold" to another country on the basis of convincing arguments in support of those principles. Accounting principles of one country have moved to another country when two conditions have existed:

1. The second country had no organized body of accounting principles in the first place, and

2. Large amounts of capital from the first country were invested in businesses in the second country, with the consequent ability on the part of those investors to impose their own accounting requirements on the businesses.

To the extent that the U.S. continues to increase its investments abroad, the accounting principles of the U.S. will exert increasing influence on the principles of other countries, but this process will move considerably more slowly when those principles clash with an already accepted local body of principles.

HOW SHOULD ACCOUNTING PRINCIPLES BE DEVELOPED?

At this point I shall drop for a moment my role as a foreigner and speak as an American CPA. In 1964 the Council of the American Institute considered a proposal whereby the Institute would arrogate to itself the sole right to determine what should be considered to be the *only* "generally accepted accounting principles," and to make such principles mandatory.

The proposal constituted an attempt to give Institute accounting pronouncements authority through coercive action, i.e., holding the threat of disciplinary proceedings over members' heads if they do not refer to deviations from an Accounting Principles Board (APB) pronouncement, however unwise the particular pronouncement may be. This retrograde step to replace persuasion with compulsion would be a repudiation of the position for persuasion reaffirmed time after time by the leaders of the American profession from its beginnings up to now.

The Institute does not have the authority to force the public to accept its own definition of what does, and what does not, fall within the term "generally accepted accounting principles." Ill-advised attempts by the Institute to exercise authority which it does not have over third parties, particularly in the case of an APB opinion which might ignore substantial authorities and represent only a particular brand of accounting thought, could lead to two possible results: either the Institute would be discredited in those quarters where it really counts, such as the business and financial community, allied professions and the Government, or that body which does have the authority, namely the SEC, would be forced by public pressure to take the irrevocable step of asserting its latent authority over accounting prin-

ciples on the grounds that such a step was necessary to bring order out of the chaos created by the Institute's own actions. The SEC quite properly wants to avoid taking this step. An excellent statement on accounting principles and why they cannot be uniform was submitted recently by the SEC to the House Committee on Interstate Commerce. It terminates as follows:

> . . . the Commission has cooperated throughout the years of its existence with representatives of the American Institute of Certified Public Accountants, and others, in an endeavor to develop and promote better financial reporting, and a more general acceptance of sound accounting practices. Experience has borne out that the investor, and the public, are best served by this practice, and by the policy of requiring a certificate of independent accountants which expresses an opinion as to the overall fairness of the financial position and operating results reported upon, and the avoidance of prescribing detailed regulations as to accounting methods, practices, or principles.

The APB proposal was temporarily deferred by the passing of a substitute resolution which reads as follows: "It is the sense of this council that reports of members should disclose material departures from opinions of the APB, and that the President is hereby authorized to appoint a special committeee to recommend to council appropriate methods of implementing the substance of this resolution." This gives a temporary delay, but strong efforts will continue to be made to make the APB opinions mandatory.

THE 180-DEGREE TURN

I am a private pilot. I am well aware of the excellent work done by the University of Illinois to protect airplane pilots who are not instrument-rated from getting into trouble through inadvertently flying into weather conditions they are not trained to handle. The University developed what is known as the 180-degree turn. It sounds like a very simple matter, but statistics show that the average pilot, upon losing his reference to the horizon line, can control his plane no longer than three minutes before entering what is called a grave-yard spiral and crashing. The University of Illinois procedure teaches him to make a very slow and careful 180-degree turn back towards the good weather he came from. In this APB case, I think the American Institute is going in the wrong direction. I believe the University of Illinois could perform a great service for the members of the accounting profession. Teach them to make a 180-degree turn. They should abandon this authoritarian approach, and follow another course.

A NEW COURSE

It is all very well for the Institute to propose and to recommend; this is leadership that the profession is expected to exercise. But their proposals should be acceptable to other interested bodies. The American Accounting Association should give its opinion on each one of the bulletins of the APB shortly after they are issued. It should also take the initiative in issuing bulletins of its own on current problems which the APB seems unable to get around to. The Financial Executives Institute should adopt the same practice. The National Association of Accountants has already done so to some extent. Their *Research Report Number 36,* "Accounting Problems in Foreign Operations," has gone a long way to supplant the outmoded bulletins of the AICPA.

It is only after bodies such as these come to an agreement on an issue, and a proposed procedure has been accepted in practice, that the CPA's, acting as auditors, will be in a position to properly police the procedure.

This method of determining principles would make more sense to an accountant from another country. I am sure he would say: "We are always willing to consider the adoption of your principles and procedures where they appear to be better than ours, and provided we can convince our local tax and government authorities, but it would certainly be easier for us to do this if we had a little more confidence in your principle-making process."

The American Accounting Association should take a larger part in this process. I hope that the University of Illinois Center for International Education and Research in Accounting will lead the way.

*The Influence of Government Agencies on Accounting Principles with Particular Reference to the Securities and Exchange Commission**

ANDREW BARR†

The influence of government agencies on accounting, at least in my experience at the Securities and Exchange Commission,[1] is a popular subject for undergraduate students as well as for candidates for master's and doctor's degrees in accounting. It is with some misgivings, therefore, that I attempt to compete in this field. The scholars should produce a more unbiased appraisal of the situation than would an active participant in the continuing effort to narrow areas of differences in accounting.

The subject of our discussion usually is stated as though the government agencies are the principal forces at work, with strong implications at times that this is not a good thing — that the adoption of rules, forms, and uniform classifications of accounts tends to create road-

* This article was previously published in *The Michigan CPA.* Permission to reprint it is gratefully acknowledged.

† Andrew Barr is Chief Accountant of the Securities and Exchange Commission, a position he has held since 1956. He was the president of the Federal Government Accountants Association in 1954-55. Mr. Barr received the Career Service Award of the National Civil Service League in 1955, and the President's U.S. Award for Distinguished Federal Civilian Service in 1960.

[1] The Securities and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication by any of its employees. The views expressed herein are those of the author and do not necessarily reflect the views of the Commission or of the author's colleagues on the staff of the Commission.

blocks to progress. Those who participate in the rule-making process know that requests for and resistance to change can develop from either camp — the regulated or the regulator. Some examples of this will be in order later.

In this discussion I intend to deal primarily with SEC experience in its own activities and with the policies of other independent regulatory agencies which have an interest in the same questions. Percival Brundage, in discussing the government's influence on accounting in an article in *The Journal of Accountancy* in 1950 commented on such matters as income tax regulations, government contract cost principles, renegotiation and price redetermination regulations, cost studies of the Federal Trade Commission as well as the SEC's influence in prescribing the financial data to be filed with it.[2] The impact of the tax laws is so generally recognized and has been the subject of so many treatises and studies by accounting committees that I see no need to attempt a summary here. Specific examples, however, will come up for exploration. It is well known that tax rulings do not necessarily reflect generally accepted accounting principles in some cases.[3]

Mr. Brundage cites as the first government regulation in the country relating to accounting practice an act passed by the Minnesota legislature in 1865. Then came accounting instructions for railroads issued in 1876 by the Railway Commissioners of Massachusetts. Next in line appears to be a classification of operating expenses issued in 1894 by the Interstate Commerce Commission, which had been established in 1887. This classification was revised in 1901 and 1907; the latter revision provided for depreciation for the first time.

The discussion of the last few years over the accounting policies of the ICC would lead the present generation to believe that that agency had not made its contribution to the advancement of accounting principles. However, a book entitled "American Railway Accounting, A Commentary,"[4] published in 1918 by Henry C. Adams, Ph.D., LL.D., then Professor of Political Economy and Finance at the University of Michigan, and from 1887 to 1911, in charge of the statistical and accounting work at the ICC, is interesting reading today. The first uni-

---

[2] Brundage, Percival F., "Influence of Government Regulation on Development of Today's Accounting Practices," *The Journal of Accountancy,* November, 1950, pp. 384-391. See also Werntz, William W., "The Influence of Administrative Agencies on Accounting," *Handbook of Modern Accounting Theory,* Morton Backer, Ed., Prentice-Hall, Inc., New York, 1955, Chapter 4.

[3] I take note here of William A. Paton's "Comment on The Incredible Schulde Decision" in *The Michigan C.P.A.,* July-August, 1963.

[4] Henry Holt and Company, New York, 1918.

form system of accounts issued in 1914 was discussed in this volume. Adams testifies to the influence of these pioneering efforts when he says in his preface that, "The American system of railway accounts is known and consulted by accounting experts in many lands. Accountants in China, Japan, New Zealand, Canada, and some of the South American and South African states, desire to learn what this country is doing, as a help to the solution of their local problems." For these he included reprints of the classifications promulgated by the ICC. In a final paragraph of the preface addressed to university students, he said that "all sound accounting rules reflect the nature of the self-determining laws of business life."

In his first chapter Adams elaborates on this point and discusses the compelling character of an accounting rule. He says that "established rules of accounting are generalizations for the guidance of business conduct, a disregard of which is a step in the direction of business disaster." He states that, "It is an accepted rule of accounts that dividends should be paid out of current or past profits — a declaration which touches capital is not only a lie to the stockholders but it dissipates their assets and is an abuse of trust." Another accepted rule cited is that a net revenue or surplus arises only after the deduction of all forms of expense incurred in its production. He observes, "An accounting rule which requires that adequate repairs, replacements, and depreciation should be made a current charge against revenues, is a business law of self-preservation." Accrual accounting is supported in these words: "A balance in the bank is no proof that a business is in a prosperous condition, or that this cash may be safely withdrawn from the business or used for improvements and extensions. A bank balance fails to disclose outstanding liabilities. Many business disasters are traceable to a disregard of this simple distinction between accruals and cash."

These three rules have not lost any of their vigor by passage of time. But a more convenient support for these rules may be found in Professor Paton's article in the April, 1963, issue of *The Accounting Review* entitled "The 'Cash-Flow' Illusion." Having injected the "Cash-Flow" matter at this point, I will quote one more passage from Adams to emphasize the importance of proper accrual accounting and that "Cash-Flow" is not an antidote for bad accounting. Concluding a section on the theory of depreciation accounting is the following paragraph:

It is the function of accounting to ensure that current statements are true,

and this can be done with greater certainty by means of formal depreciation charges than by relying upon the more or less arbitrary instructions of the general manager. The temptation to influence the market by 'skinning' the property ought to be removed from those whom the stockholders have appointed as trustees of their investment, and this can be done, in part at least, by the rule that regular monthly charges be made for the creation of a depreciation reserve.

The early work at the ICC certainly was a contribution to the development of accounting principles.[5] But times do change and in recent years the ICC has found itself in the position of defending against charges of not keeping up with the times. During the last six or seven years it might be said that the accounting profession and certain allies, including the New York Stock Exchange, have had more impact on the ICC than it has had on accounting principles. In any event, a committee was appointed by the American Institute of Certified Public Accountants to work with the ICC in an effort to bring railroad accounting into agreement with generally accepted accounting principles. A number of the Committee's suggestions were adopted but in one major area of difference, that of deferred tax accounting, no change was made in the Commission's accounting requirements except that full disclosure was required to be made in reports to the Commission of what the effect would have been had deferred tax accounting been followed. The majority of the Committee did not recommend a proposal to change from replacement accounting to depreciation accounting for track structures as urged by a prominent accountant in speeches and in testimony before the House Committee on Government Operations which held hearings in the spring of 1957 on this point, on deferred tax accounting and on other matters.[6]

Another significant current development which demonstrates that the ICC can meet the needs of the investing public and still retain all the advantages which a uniform system of accounts provides for its regulatory needs resulted from a rule-making proceeding in response to a petition filed by Arthur Andersen and Company. The petition requested a rule or decision that would permit carriers to publish financial statements prepared in accordance with generally accepted

---

[5] See Brundage, Percival F., "Milestones on the Path of Accounting," *Harvard Business Review,* July, 1951, p. 73, and "Influence of Government Regulation on Development of Today's Accounting Practices," *op.cit.*

[6] See *The Journal of Accountancy,* May and November, 1957, and March, 1958, for releases and editorial comment; also *The Federal Accountant,* June, 1958, pp. 55-56.

accounting principles in annual reports to stockholders or otherwise released to the public. The ICC proposed a rule which would have required the financial statements to be consistent with the Commission's accounting regulations. The rule-making proceeding[7] was held and the resulting order, issued effective July 1, 1962, stated:

> Carriers desiring to do so may prepare and publish financial statements in reports to stockholders and others, except in reports to this Commission [ICC], based on generally accepted accounting principles for which there is authoritative support, provided that any variance from this Commission's prescribed accounting rules contained in such statements is clearly disclosed in foot-notes to the statements.

The principal variance discussed in the release was deferred tax accounting, as to which considerable difference of opinion was recognized. But the ICC squarely faced the full issue as to all variances rather than giving a fragmentary opinion on the point which caused the controversy.

It should be noted here that the railroads are not subject to the Securities Act of 1933, and that the Securities Exchange Act of 1934 provides that duplicate copies of reports filed with the ICC of the same general character may be filed with the SEC in satisfaction of the annual reporting requirement of the Act.

We have observed that, pursuant to the option provided in the ICC's new rule, some companies have revised their financial statements in reports to stockholders and, in three instances, in prospectuses under the Securities Act. These filings were made by new holding companies offering shares in exchange for railroad company shares, and thus certified financial statements of the railroads were required to be included in the prospectus.

Time does not permit a historical discussion of the accounting policies prescribed by all of the principal independent agencies, but those prescribed by the Federal Power Commission (FPC) do require consideration as some of their policies have been the subject of critical comment and, to a considerable extent, accounting policies established in FPC cases have a direct bearing on opinions of the SEC under the Public Utility Holding Company Act of 1935 and on financial statements filed under the securities acts. Uniform systems of accounts were made effective by both Commissions as of January 1, 1937. The first opinions of the FPC, and parallel opinions of the SEC that aroused

---

[7] ICC No. 33581 (49 CFR 25), decided January 25, 1962.

the interest of accountants generally, were published in the early 1940's. George O. May, in a book published in 1943,[8] discussed the Northwestern Electric Company case, in which common stock was found by the FPC to have been issued without consideration. In this case the FPC ordered that the debit amount created equal to the par value of the stock be amortized. Mr. May pointed out that the FPC's Chief Accountant testified it was policy, rather than accounting principle, which led to the order to amortize the amount rather than to dispose of it at once or to reclassify the debit as discount on stock.

William A. Paton, a year later, referred to May's discussion and the intervention of the American Institute of Accountants by filing an amicus curiae brief with the Supreme Court in the Northwestern Electric Company case as signs of an awakened interest of the accounting profession in the control of business activity by governmental agencies through accounting means.[9] The article was written as a criticism of the accounting policies prescribed by the FPC and as they were explained by its Chief Accountant in his testimony in the Arkansas Power and Light Company case. Professor Paton questioned the value of the distinction required between "original cost" (the cost of property to the person first devoting it to public service) and "acquisition adjustments" (the difference between total actual cost of property purchased as an operating unit and "original cost" — "aboriginal cost" to some people). Accounting for intangibles, write-ups, intercompany profits, transactions between affiliates, consolidations, and depreciation all get Professor Paton's attention with very little praise. His concluding paragraph is:

> I, for one, would like to see the Commission direct its accounting effort primarily toward the constructive task of improving utility accounting practice of the future, and abandon the present program of wiping out a substantial portion of the investment in utility property as it now stands on the books.

The program was not abandoned and new problems have developed in the ensuing twenty years. Professor Paton received from the Institute an award in recognition of distinguished services to the accounting profession for his article which was described in the citation as "the most significant and valuable article on an accounting subject" published during the twelve months ended August 31, 1944.[10]

---

[8] May, George O., *Financial Accounting,* The Macmillan Company, New York, 1943, pp. 261-265.

[9] Paton, William A., "Accounting Policies of the Federal Power Commission — a Critique," *The Journal of Accountancy,* June, 1944, p. 432.

[10] *The Certified Public Accountant,* October 31, 1944, p. 3.

The Committee on Accounting Procedure of the Institute, with both May and Paton as members, considered the trend of the utility cases and issued a report in 1946 to the Executive Committee which, pursuant to the resolution of council, forwarded the report to the membership. In its covering letter the executive committee said:

> The significance of the report lies in the indication which it affords of differences in the rules and principles which are applied in different fields. The existence of such differences between regulatory and general accounting is a fact that should be of interest to all concerned with accounting. Recognition of this fact may influence the development of accounting in either or both of these fields.

The implications of this statement have been the subject of considerable debate among accountants, so much so that on request from the Committee on Auditing Procedure the Accounting Principles Board ruled in 1962 that:

> . . . the basic postulates and the broad principles of accounting comprehended in the term "generally accepted accounting principles" pertain to business enterprises in general. These include public utilities, common carriers, insurance companies, financial institutions, and the like that are subject to regulation by government, usually through commissions or other similar agencies.

However, the Board observed that differences in the application of generally accepted accounting principles between regulated and non-regulated businesses could arise because of the effect of the rate-making process in regulated businesses.[11]

It is not for me to evaluate the influence of the SEC on the development of accounting principles; such an evaluation should come from unbiased sources. Yet unbiased sources may be hard to find because those who do not agree may be overly critical, while those who approve may remain silent to avoid the appearance of self-seeking. It would be expected that college professors would provide unbiased testimony, but I have noticed on a number of occasions that in making well-meant suggestions they sometimes disregard pertinent facts, including the clear-cut provisions of the laws we are required to enforce.

The work of the SEC and other governmental agencies attracted considerable attention at the fiftieth anniversary meeting of the American Institute of Accountants (AIA, later renamed the American Institute of Certified Public Accountants, AICPA) in 1937. In an address

---

[11] *The Journal of Accountancy,* December, 1962, p. 67.

at that meeting Andrew Stewart listed six important developments emanating from regulatory bodies which had affected the practice of accountancy in the last fifty years. These were (1) the development of uniform classifications of accounts for common carriers and other regulated industries; (2) the support given the profession by the Federal Reserve Board and the securities exchanges in the development of sound accounting procedures and principles: (3) the unsuccessful attempts to control prices through costs under the Clayton Act of 1914, the National Industrial Recovery Act of 1933, and the Robinson-Patman Act of 1936; (4) the impact of the early income-tax laws; (5) the retarding influence of state corporation laws; and (6) "the effect of the administration of the Securities Act of 1933 and the Securities Exchange Act of 1934, which, together, constitute the greatest single aid to the development of sound accounting principles and forms of presentation of financial statements in the history of our profession in the United States."[12]

The basis for this overall opinion may be found in the following passage:

> It is obvious that with the close harmony which has existed between the Commission and the profession, the influence of the Commission, backed by the effective powers which it possesses, has been in the direction of insisting on the presentation of financial statements prepared in accordance with sound accounting principles. An effective weapon has been the Commission's insistence that the accountant express his opinion of the propriety of the principles employed in cases where the accountant has expressed a qualification in his certificate, or where disclosures in the statements indicate accounting principles of doubtful validity. The ultimate effect of such a policy, supported by the powers conferred on the Commission by the Act, must be to enforce on all registrants of securities a sound code of accounting principles.[13]

In December, 1936, Carman G. Blough, the SEC's first Chief Accountant, delivered an address before the American Accounting Association in which he praised its efforts in developing the "Tentative Statement of Accounting Principles," cited examples from experience of the difficulty in determining what was generally accepted at that time, and said:

> What the future policy of the Commission will have to be, I am not prepared to say, but we are reluctant to undertake the prescription of principles to be followed except as a last resort. It is hoped the profession will itself develop greater consistency in the many places where uniformity appears

[12] "Accountancy and Regulatory Bodies in the United States," The American Institute of Accountants, Fiftieth Anniversary Celebration, 1937, pp. 133-34.

[13] *Ibid.*, pp. 137-38.

essential to avoid confusion in the presentation of financial data. I feel this Association can do much to improve the general tone of accounting and you may be assured the Commission stands ready in whatever way it can to assist the profession in accomplishing this purpose.[14]

It was only a few years after this statement was made that the SEC published a report on its investigation of the McKesson and Robbins case which was concluded with the following paragraph:

We have carefully considered the desirability of specific rules and regulations governing the auditing steps to be performed by accountants in certifying financial statements to be filed with us. Action has already been taken by the accounting profession adopting certain of the auditing procedures considered in this case. We have no reason to believe at this time that these extensions will not be maintained or that further extensions of auditing procedures along the lines suggested in this report will not be made. Further, the adoption of the specific recommendations made in this report as to the type of disclosure to be made in the accountant's certificate and as to the election of accountants by stockholders should insure that acceptable standards of auditing procedure will be observed, that specific deviations therefrom may be considered in the particular instances in which they arise, and that accountants will be more independent of management. Until experience should prove the contrary, we feel that this program is preferable to its alternative — the detailed prescription of the scope of and procedures to be followed in the audit for the various types of issuers of securities who file statements with us — and will allow for further consideration of varying audit procedures and for the development of different treatment for specific types of issuers.[15]

The Commission's influence on the development of accounting principles is exerted through its support of the profession as indicated above and through the daily review of financial statements filed under the various acts administered by it. Guidelines as to the form and content of the financial statements are given in Regulation S-X and the statements to be filed are specified in the instructions to the forms. These guidelines are supported, supplemented, or interpreted in letters of comment, conferences, accounting series releases and opinions of the Commission.

Accounting Series Release No. 1, published April 1, 1937, announced "a program for the publication, from time to time, of opinions on accounting principles for the purpose of contributing to the development of uniform standards and practice in major accounting questions." It also contained an opinion which specifically dealt with the treatment

[14] Blough, Carman G., "The Need for Accounting Principles," *The Accounting Review,* March, 1937, p. 37.

[15] *Accounting Series Release No. 19,* December 5, 1940.

of losses resulting from the revaluation of assets and which stated that it is improper for a company to charge the recognized loss in the plant write-down to capital surplus, but if a deficit in earned surplus resulted, it would be proper, with stockholder approval, to close the deficit to capital surplus and go forward with a dated earned surplus. This release was the forerunner of a series of releases which develop the Commission's policy on quasi-reorganizations.[16] The commission's position has been that the procedure specified must be followed when a net write-down and elimination of a deficit is involved, but the procedure does not contemplate a net write-up. It has been urged, however, that a net upward restatement of assets should be permitted in a quasi-reorganization. A recent example of this approach is found in Arthur Wyatt's study of business combinations. He recommends that in those combinations effected by the issuance of stock in which the constituents are of approximately equal size, the assets of both constituents should be restated at fair value (up or down), earned surplus should be eliminated as a "fresh start" for the constituents, and that this should be known as the "fair-value pooling" concept.[17]

Because the securities acts are basically disclosure statutes, we hear pleas that there is adequate disclosure when a footnote provides information needed to put the financial statements in accord with generally accepted accounting principles, and therefore the financial statements need not be amended. This continued controversy led the Commission in 1938 to issue *Accounting Series Release No. 4* stating its administrative policy on financial statements. This has not stopped the debate. The policy was elaborated on in *Accounting Series Release No. 96* as follows:

> *Accounting Series Release No. 4* recognizes that there may be sincere differences of opinion between the Commission and the registrant as to the proper principles of accounting to be followed in a given situation and indicates that, as a matter of policy, disclosure in the accountant's certificate and footnotes will be accepted in lieu of conformance to the Commission's views only if such disclosure is adequate and the points involved are such that there is substantial authoritative support for the practice followed by the registrant, and then only if the position of the Commission has not been expressed previously in rules, regulations, or other official releases of the Commission, including the published opinions of its Chief Accountant. This

[16] See *Accounting Series Releases No. 15,* March 16, 1940; *No. 16,* March 16, 1940; and *No. 25,* May 29, 1941.

[17] Wyatt, Arthur R., "A Critical Study of Accounting for Business Combinations," *Accounting Research Study No. 5,* American Institute of Certified Public Accountants, New York, 1963, p. 107.

policy is intended to support the development of accounting principles and methods of presentation by the profession but to leave the Commission free to obtain the information and disclosure contemplated by the securities laws and conformance with accounting principles which have gained general acceptance.[18]

I have indicated that the Commission has supported the profession in its efforts to narrow the areas of difference in accounting principles. This is accomplished in part by citing the Institute's accounting research bulletins, when we agree with them, as evidence of the authoritative support required by *Release Nos. 4* and *96*. There have been very few instances when we have disagreed with a bulletin. This may be accounted for in part because we have had an opportunity to comment on the content of most of them prior to publication in much the same manner as the public may comment on our rule-making proposals under the Administrative Procedure Act.

Nevertheless, we are aware that some critics of the present state of accounting point to governmental agencies (including the SEC) as barriers to progress rather than as a stimulant to the profession in the development of greater unanimity of opinion on accounting principles. I have cited Mr. Brundage and Mr. Stewart on the positive side of this question. Mr. Brundage has also written on the negative side in an article entitled "Roadblocks in the Path of Accounting."[19] Let me comment briefly on the five roadblocks cited in that article which were: (1) the monetary obstacle, (2) the overwhelming effect of taxation on accounting and business decisions, (3) the misconception that financial statements are true and accurate in an absolute sense, (4) governmental regulation, and (5) the natural conservatism of accountants. Conservatism, he states, is not limited to our profession — lawyers have it, too.

The problem of coping with the effect of the changing price level on financial reporting has been under serious study for at least thirty years. I have reported elsewhere on the Commission's awareness of the problem,[20] so I need not repeat here. This is an important problem for management and investors and as such it rightfully held a prominent place on the program of this year's meeting of the American Accounting Association. Ralph C. Jones, who has studied the

---

[18] Published January 10, 1963. *Accounting Series Release No. 4* was published April 25, 1938.

[19] *Harvard Business Review,* September, 1951, p. 110.

[20] "Financial Reporting for Regulatory Agencies," *The Journal of Accountancy,* February, 1958, p. 26.

problem for many years, noted a long-term trend toward recognition of the problem. He proposed that the traditional monetary postulate, "Fluctuations in the value of the monetary unit, which is an accounting symbol, may properly be ignored," be changed to read "Fluctuations in the value of the monetary unit during a single accounting period may properly be ignored" or "No accounting period should be longer than the time during which fluctuations in the value of the monetary unit under the existing conditions may properly be ignored."[21]

The Commission has noted that the practices of giving recognition in the accounts to the effect of the changing value of money is followed by some foreign corporations with the approval of their independent accountants. We are also aware of limited acceptance of this practice in the United States. The subject is referred to in a pamphlet, "Accounting and Other Requirements for the Sale of Foreign Securities in the U. S. Capital Market," which was first published in 1959 and revised in 1962 by the AICPA for the assistance of its members. The pertinent passage is:

> Another common area of difference between American and foreign accounting principles relates to property accounts and the provision for depreciation. The accepted American basis of carrying property in the balance sheet is at historical cost. The provision for depreciation charged in the income account should represent amortization, by a recognized method, of the actual cost of the properties over their economic lives. Although there has been some pressure in the United States to adopt economic depreciation, based on current replacement cost or current price levels rather than on actual cost, the business community and the accounting profession have not accepted this theory and the SEC has not recognized it as proper accounting in financial statements filed with the Commission.

An example of the second roadblock — taxation — will be covered when I discuss the investment credit. I agree completely with Mr. Brundage that the misconceptions of the nature of financial statements is a roadblock — a primary purpose of the securities acts is to prevent the use of misleading information and to require disclosures necessary to prevent misleading inferences. Differences of opinion as to what is required in this area existed before the passage of the acts and from the looks of things may continue to exist for some time to come. Some improvement in understanding should come from efforts to apply Mr. Brundage's suggestion to "bore a hole straight through this roadblock by the use of judgment, full explanations, and wide publicity of the facts and their significance." In his brief discussion of governmental

---

[21] From a paper presented by Mr. Jones at the Price Level Panel discussion on August 28, 1963, at Palo Alto, California.

regulation — the fourth roadblock — Mr. Brundage mentions the ICC and the FPC as well as the SEC. His comment on the SEC is:

> Although SEC regulation has for the most part followed constructive lines, and the Commission in general has refrained from laying down restrictive accounting rules, there nevertheless has been a tendency to oppose innovation and new forms of reports. My suggestion for improvement in this field is to urge more latitude in accounting treatment to meet changing conditions as they arise.

By his statement that there has been a tendency to oppose innovation and new forms of reports, Mr. Brundage seems to indicate that we represent the fifth roadblock designated as "the natural conservatism of accountants." On some proposals we have opposed change. His suggestion that there be more latitude in accounting treatment to meet changing conditions has been heeded by us as indicated in our opinions and releases, and we were severely criticized recently when we issued *Accounting Series Release No. 96* dealing with the investment credit, which is discussed later.

Despite efforts to solve the problems relating to the determination of periodic income and the presentation of meaningful statements of income, this subject continues to be controversial. It was one of the most widely debated post-World-War-II accounting problems and was the subject of Commission studies and conferences with representatives of the accounting profession and others. At one point the Commission's staff and Institute representatives were very close to agreement on the proposed content of *Accounting Research Bulletin No. 32*, now Chapter 8, "Income and Earned Surplus," of *Accounting Research Bulletin No. 43*. The relative merits of the *all-inclusive income statement* advocated by the Commission's staff and the *current operating performance* concept believed by its supporters to be more useful as an indication of future earning capacity of a company are discussed in this chapter, and the latter concept is endorsed. Unfortunately we reached an impasse on the classification, as between income and earned surplus of a few items, and parted company. Having objected to various aspects of the *Bulletin* in the course of its preparation, the Chief Accountant of the Commission wrote the Director of Research of the Institute that "the Commission has authorized the staff to take exception to financial statements which appear to be misleading, even though they reflect the application of *Accounting Research Bulletin No. 32*." This letter and the bulletin were published in the January, 1948, issue of *The Journal of Accountancy*.

About this time we began working on a major revision of Regulation S-X, the first since its publication in 1940. First drafts of this revision included new terminology such as "retained earnings" and avoided the use of the term "reserves," but this approach proved too cumbersome and was abandoned. However, a thorough analysis was made of letters of comment on financial statements for a considerable period of time in order that recurring inadequacies could be taken into account in drafts of the revision exposed to cooperating committees. Some of the proposed revisions were culled out at this stage and a formal notice of rule-making was published in July, 1950. Then the fireworks began! The preliminary draft had been sent to approximately 600 persons on September 21, 1949, and more than 3,000 persons were sent copies of the second draft which was published in the Federal Register pursuant to the requirements of the Administrative Procedure Act. Approximately 175 persons commented on each draft. The principal attacks were directed at the inclusion of the definition of a quasi-reorganization as previously published in *Accounting Series Release No. 25;* the inclusion of the statement of administrative policy of *Accounting Series Release No. 4,* to which I have referred; a requirement that, except as otherwise specifically provided, accounting for all assets shall be based on cost; and a requirement for the use of the all-inclusive income statement.[22]

The American Accounting Association, at its 1950 annual meeting, approved a resolution presented by the Chairman of its Committee on Accounting Concepts and Standards which stated:

> WHEREAS the development of accounting principles and accounting practices is a process which is necessarily continuous in order that they may be kept current with changing economic conditions, and
>
> WHEREAS it is to the public interest that such development continue so that financial statements may serve as well as possible the needs of investors and other interested parties, and
>
> WHEREAS experience has shown that the establishment of accounting principles by rule or regulation in certain fields has retarded such development,
>
> *Now Therefore Be It Resolved* by the members of the American Accounting Association in meeting assembled:
>
> that the establishment by rule or regulation of accounting principles, however meritorious in themselves they may currently seem to be, would tend to hamper the development of accounting and prevent the free exercise of judgment, in accordance with accepted principles, as to the most useful

[22] A Summary by the Editorial Staff of Accountants' Dissents on many of SEC's proposed changes in Regulation S-X, *The Journal of Accountancy,* October, 1950, p. 312.

presentation of financial data, and that accordingly certain proposals of this nature contained in a draft of a proposed amendment of Regulation S-X of the Securities and Exchange Commission would not be in the long range public interest, and

Be It Further Resolved that the contents of this resolution be made known to the Securities and Exchange Commission.[23]

And the American Institute of Accountants, in a meeting about a month later in the same city, ratified a similar resolution of its council as follows:

WHEREAS, the council of the American Institute of Accountants has considered the proposed revision of Regulation S-X by the Securities and Exchange Commission and has observed that rules establishing matters of accounting principle have been incorporated therein; and

WHEREAS, this proposal represents a change in policy from one which has proved highly successful in improving financial reporting during recent years and constitutes a move which the council believes is adverse to the public interest in that it would inevitably lead to inflexibility of accounting procedures and a stagnation of accounting development; and

WHEREAS, the council is of the opinion that the orderly development of accounting in the past has been achieved by the combined and coordinated efforts of all concerned including the business world, the accounting profession and governmental agencies, and that this method has proven so successful in practice that it should in the public interest neither be minimized nor abandoned;

Now Therefore Be It Resolved, that the council is opposed to the issuance of rules by the Securities and Exchange Commission establishing matters of accounting principle, and instructs the executive committee and the officers of the Institute to take such steps as they deem appropriate to convince the Securities and Exchange Commission that it should continue its past policy in this respect.[24]

At the request of the Institute its representatives were heard by the Commission and as a result new items relating to accounting principles were deleted, all accounting series releases were incorporated by reference, and the all-inclusive income statement controversy was compromised by including the now well-known Item 17 in Rule 5-03.[25] Thus a major effort to influence the development of uniform standards and practices was concluded.

---

[23] *The Accounting Review,* April, 1951, p. 254.

[24] American Institute of Accountants, Annual Reports for the Year 1949-1950, pp. 9-10. See also *The Journal of Accountancy,* November, 1950, p. A-20, for an announcement of the passing of the resolution by the members attending the annual meeting.

[25] See articles in *The Journal of Accountancy* for February, 1951, for a discussion of the revision.

But what have we done for you lately?

In recent years there have been some interesting rule-making proceedings involving accounting principles but none have aroused such violent differences of opinion, except perhaps stock options, as deferred tax accounting and the investment credit. The regulatory agencies have diverse solutions for both issues. The ICC has applied its original "flow-through" decision to the investment credit but, as I noted earlier, requires disclosure in a note and permits recasting of the published statements. The FPC adopted rules on deferred tax accounting and these rules and the question of that Commission's authority over reports to stockholders are presently the subject of litigation. The FPC has rule-making in process on the investment credit and its staff has recommended that the Commission find for the "flow-through" method. As to the investment credit, the Civil Aeronautics Board's rule-making is still in process, but the present indications are for a 48-52 percent solution.

A rehearing has been requested on the Federal Communications Commission's decision[26] to continue the "flow-through" basis. The FCC's decision, with three dissents in a Commission of seven members, identified three basic ways to reflect the credits, namely: 100 percent flow-through, 48 percent flow-through with 52 percent normalized as deferred taxes (advocated by Western Union), and normalization by a credit to plant accounts with a charge to operating expenses (advocated by American Telephone and Telegraph). The majority found that their solution reflected the intent of Congress. The opposite view is succinctly presented in Commissioner Hyde's dissenting statement:

> The order which has been adopted is not consistent with accounting regulations previously approved by the Commission, is inconsistent with accounting principles supported by a preponderance of opinion in the accounting profession, is contrary to the legislative intent of the investment credit law, and results in accounts giving a substantial distortion of income for the initial year, as compared to the remaining years of the life of the property.

Since the legislation on the investment credit was passed near the end of the year, all the agencies were under pressure to announce rulings, temporary or otherwise, so that companies under their jurisdiction could close their books for 1962. The same pressure was felt at the SEC from non-regulated companies subject to the reporting requirements of the securities acts. In this connection it should be

[26] Report and Order in Docket No. 14850, (RM-377) (RM-381) adopted July 29, 1963.

noted that the regulatory agencies which have uniform systems of accounts were faced with the problem of amending them or of issuing interpretations governing their application to the investment credit problem. The regulatory commissions of the states had the same problem.

If experience at the SEC is an indication of what happened at other agencies, all were deluged with memoranda, letters, statistics, newspaper clippings, and visits by interested parties urging various and conflicting interpretations of the intent of Congress and solutions to the problem. Two Columbia professors, for example, filed with the ICC a paper in which they supported the ICC's "flow-through" policy on deferred taxes and recommended it for the investment credit. They stated: "the simplest, clearest and most direct accounting treatment is to be recommended. This treatment will be to show the credit as a tax reduction in the year received. Notes can, and should, report to ICC and the public what the credit is and how it might affect the future."[27]

The most recent federal government ruling to come to my attention is that of the Comptroller General of the United States on August 15, 1963, in a letter to the Secretary of Defense. This ruling finds that the intent of Congress is properly reflected in the Accounting Principles Board's *Opinion No. 2,* and for reasons stated the Comptroller General does not favor, "for determination of costs under a Government contract, a depreciation basis for assets that does not reduce the acquisition cost by the tax credit taken."

Two well-known experts on utility accounting debated the accounting treatment of the investment credit at the Great Lakes Conference of Railroad and Utilities Commissioners in June, 1964. Leonard Spacek analyzed the legislative record and concluded that unless his marshalling of the facts from the record is wrong "there is only one proper basis of accounting for the credit and that is to record it as a credit against property cost, either directly or in an *account* offsetting that cost."[28] Donald C. Cook, reviewing the same legislative record, said in opposition to Mr. Spacek's views, "The whole legislative history of the statute makes entirely clear that a tax reduction in each successive

---

[27] Dean, Joel, and Harriss, C. Lowell, "Railroad Accounting Under the New Depreciation Guidelines and Investment Tax Credit," *The Accounting Review,* April, 1963, pp. 229-242.

[28] Spacek, Leonard, "Accounting Treatment of Investment Credit," Arthur Andersen and Co. Subject File — AD 7220, Item 36.

fiscal period ["flow-through"] was intended by the Treasury and by Congress."[29]

In recognition of the substantial diversity of opinion that existed in this matter, the SEC issued *Accounting Series Release No. 96* on January 10. This release states that the Commission will accept, with certain limitations, the method endorsed by the Accounting Principles Board or the 48-52 percent method, or, in the case of regulated industries, the 100 percent flow-through method when authorized or required by regulatory authorities. The *Release* also specifies that the balance sheet credit should not be made directly to the asset account, that the current provision for income taxes should not be stated in excess of the amount payable for the year. It includes other comments regarding adequate disclosure and details of certain other accounts, and a statement that appropriately qualified certificates will be accepted in cases where an alternative accounting treatment acceptable to the Commission is followed by the registrant.

Before issuing *Release No. 96* the Commission considered a substantial amount of written material in support of the alternative solutions to the problem and listened to informal oral arguments on the subject as well as on the question of whether the Accounting Principles Board majority opinion should be supported as the only solution or some exception should be permitted. The basic problem here was, as it is in so many situations, to reach agreement on the facts. As the following excerpts from *Opinion No. 2* indicate, the difference of opinion ranged from a dissenting opinion, that "the pertinent factors preponderantly support the view that the investment credit is in substance a reduction in income taxes," to the belief of the majority of the Board that the weight of pertinent factors supports their conclusion that the credit is a "reduction in or offset against a cost otherwise chargeable in a greater amount to future accounting periods."

What will be the next step in the effort to narrow areas of differences in accounting? The program of accounting research adopted by the Accounting Principles Board was recommended by a special committee of the Institute on which the SEC was represented. I was a member of the advisory committee on the study of broad accounting principles for business enterprises and found it necessary to comment that the tentative set of principles "must be recognized as a

[29] From typewritten copy of the paper, "Accounting Treatment of Tax Reduction Resulting from the Investment Credit," by Donald C. Cook, President of American Electric Power Company, Inc.

statement of what the authors believe generally accepted accounting principles should be rather than what they are today." The Board has announced an extension of its research program to include a project "to identify and codify accounting principles which the Board believes have achieved general acceptance."[30] The SEC is represented on the advisory committee for this project. Some critics say that the Board has failed. One states that the SEC should "take over" but then in the next breath says that the consequences could be quite unpleasant.[31] Some take the position that the profession should never give the Commission reason to exercise its authority to "take over."[32] The record I have recited, I believe, indicates that the Commission has supported the latter sentiment. I will let you draw your own conclusions as to the future.

[30] *The CPA,* July-August, 1963, p. 1.

[31] Anthony, Robert N., "Showdown on Accounting Principles," *Harvard Business Review,* May-June, 1963, p. 105.

[32] Hall, William D., "The Need for Uniform Accounting Standards," *The Michigan CPA,* June, 1963, p. 24.

On Developing International Accounting Meanings

ERIC L. KOHLER*

Late in 1962 I had the honor and pleasure of addressing the first International Conference on Accounting Education[1] and I made a number of critical remarks concerning the output of our American Institute's so-called research team. Since then, other publications from the same source have appeared which, as I view the situation, have amply confirmed the point of view I took at that time — a point of view I know some of you shared but were and still are not inclined to become as explosive about as was I. I hold no brief for traditional beliefs; they deserve a reexamination from time to time. But we should have reasons fashioned in terms of existing accounting concepts — and not borrowed from outside disciplines — before moving away from them. It is not my purpose now to pursue this matter further, intriguing though this might be, except merely to note that the Institute has not yet recognized the function of research as applied to accounting nor has there been any disclosure of committee considerations, if any, of research elements such as the half-dozen I proposed in the earlier talk. The only national body in our field that has been aware of the elements that constitute research has been the National Association of Accountants. Over the past thirty years the NAA has published forty-

---

* Eric L. Kohler, Chicago, is an accounting consultant. He was President of the American Accounting Association in 1936 and 1946, and was Editor of *The Accounting Review* from 1929 to 1942. Mr. Kohler was Comptroller of the Tennessee Valley Authority from 1938 to 1944 and was Controller of E.C.A. in 1948 and 1949. He is the author of *A Dictionary for Accountants, Accounting for Management,* and many other books and articles.

[1] Mr. Kohler's address at the First International Conference on Accounting Education, "Research Potentials in International Accounting," was published in *Proceedings, International Conference on Accounting Education,* Urbana (Illinois), 1963.

one research reports, most of them dealing with topical matters; several have dealt with major issues of first importance to all accountants; but the Institute's researchers, in their zeal to be counted among the originals, have conscientiously overlooked the basic techniques underlying these reports. Research in accounting differs in a number of respects from research in other fields and I hope the Center will recommend standards for research projects conducted under its auspices. I hope too that the intellectual talent from abroad now in residence here may aid in the development of research standards. This in itself could be a remarkably constructive project.

I believe our profession is dangerously close to the deliberate fostering in high places of a metaphysical system within the accounting discipline. A number of esoteric terms whose definitions have been studiously avoided have, in the minds of certain members of a small inner circle, acquired a mystique that has imprisoned their users in a conceptual world only incidentally related to the mundane realities that confront accounting and accountants. At this point I leave with you for leisurely consideration two out of a baker's dozen of these terms I have collected; of recent vintage, the one has been a precursor of the other: "measure" and "holding gain."

Directly concerning all of us, therefore, is the language we employ in our research projects, as well as in our communications with fellow accountants and clients. This involves us almost at once in problems of semantics — the study of the meaning of meaning. In our haste to get things done, we have allowed our language habits to fall into a sad state of repair. We all know accountants who are animated by the desire to be on the safe side, and who, in conforming to that desire, have available a generous supply of clichés, slogans, and other familiar phrases for an undiscriminating and seemingly never-ceasing application to a great variety of situations. One has only to turn to any official, professional pronouncement or to the average long-form report for a generous supply of examples. From my limited contacts with other languages I am of course aware that these difficulties are not confined to the English-speaking world, and that threadbare terms can be found everywhere. Their meanings are going to be difficult not only to assay but thereafter to translate into another tongue.

Let us consider for a moment the old standbys, *subjective* and *objective,* two attributives that have habitually been employed by us as accountants to produce an epithetic effect — i.e., a suggestion of weakness or strength, respectively, of the matter to which they are

applied. Each has several possible meanings. In different contexts subjective means having the quality of a subject, submissive, nominative, substantial, fanciful, introspective, merely mental and hence unreliable (in this usage it becomes a pejorative). It can also be applied to a concept affected by an individual's environment or limitations; and it is in this sense that accountants have been using the word in recent years. My own definition reads in part: ". . . having the characteristics of the individual, the peculiarities of his experience or environment, and not independently substantiated; said of an event, fact, judgment, or inference. Reliance on a subjective judgment is conditioned by convenience, cost, or faith. In projecting future events, dependence on subjective judgments can never be wholly avoided. Agreement of opinion does not of itself signify objectivity; nor does subjectivity imply that an opinion is whimsical, prejudiced, or unwise. In the absence of evidence, the extent, for example, of doctrinaire or hasty prejudgment cannot be measured; hence the widespread effort [by accountants] to reduce areas of subjective thinking [e.g., as in auditing processes]."[2]

Objective, in contrast, can refer to the expression of facts without distortion or personal feelings, to something derived from sense perception, and so on; as most used by accountants, the term means without bias and it refers to "a fact, judgment, or inference . . . capable of being substantiated by independent inquiry." At this point I have added that in actual use "it often has a . . . propagandistic or ad hominem tinge." I have also noted that at times the term suggests that it may have comparative values: "one fact may . . . be said to be more objective than another because it is observable by more persons, experimentally repeatable, more promptly recorded after observation, recorded by more competent or more disinterested observers, more precisely determinable, more coherent or interrelated with other generally accepted facts, or observed under less confusing circumstances." In this comparative sense, although ostensibly implying something extrinsically verifiable, objective has of late often been used to bolster up a weak argument or to avoid an argument altogether; unless at once amplified by particulars, it may suggest its opposite as the real meaning behind it. To keep your argument above suspicion, I suggest that the use of subjective and objective be limited to situations where a tangible standard of comparison is available.

[2] Kohler, E. L., *A Dictionary for Accountants* (second edition), Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1957, p. 476.

This brings me to the subject of attributives generally. Our accounting profession has been in the habit of employing ostensibly descriptive adjectives — one is tempted to say — ad nauseam. In the last edition of the *Dictionary* eighteen such terms were cited: *acceptable, adequate, advantageous, appropriate, desirable, material, meaningful, permissible, practicable, preferable, proper, rational, realistic, reasonable, significant, sound, systematic, useful.* Although this edition of the *Dictionary* is but six months old, regretfully I have found it necessary to add two other adjectives to this list: *fair* and *logical.* Because in their ordinary undefined use by accountants they are freely interchangeable (any one readily may be substituted for another without alteration of meaning), the philosophy behind their employment has been variously interpreted. In one of the bulletins a few thousand words in length, put out by the American Institute's old Accounting Procedures Committee, these adjectives appeared no less than 57 times, and I have been told since I made that count that I had overlooked two occurrences. The compiler of that document was obviously having trouble coordinating the views of twenty-two committee members. His copious use of these adjectives must have given some assurance to dissenters that the positions they had taken could not have been entirely wrong. Again, in Auditing Standards and Procedures, a report of the Institute's Committee on Auditing Procedure issued a few months ago, the characteristics of a *satisfactory* system of internal control are reported as including (and here I paraphrase) an *appropriate* segregation of responsibilities under *adequate* procedures that provide *reasonable* accounting control provided they are accompanied by *sound* performance practices on the part of *commensurately* qualified personnel. This was only an introductory statement and a good deal of its looseness and vagueness is removed in subsequent explanations; but the statement would have been much stronger without these five adjectives which can be described only as purely decorative in their effect. The moral of all this for those of you whose mother tongue is not English is that, in your reading of our official pronouncements, you need neither to pause nor to translate when encountering any of our interchangeable adjectives. If no meanings then emerge, it may be that none was intended!

You are not going to have an easy time translating our notions of accounting into your mother tongue where accounting theory has obvious gaps. Our accounting, as in all other parts of the world, coping more or less uninterruptedly with its already topheavy structure

of practices, has not had time to formulate an underlying philosophy.

In developing the *Dictionary* my starting point was a group of primitives, foundation or linkage terms that were essential to building accounting concepts that could be defined by the employment of language common to other disciplines. Perhaps the most basic of all was the word *primitive* itself, followed by such words as *meaning, symbol* (symbolization), *assumption, phenomenon, convention, concept, fact, proposition, reasoning, postulate, hypothesis,* and *principle.* These terms, common to all fields of human activity, are not only interrelated but serve a classificational purpose as well. Each word helps to build up the next in line, and at the same time may have some more or less direct implication for accounting; these relationships have where possible been built into their definitions as I have conceived them. Because of this, the definitions differ from those to be found in Webster or in a philosophical dictionary.

For example, among 178 other primitive terms — and here I made a random selection — one will find the basic management triangle: *authority, responsibility,* and *accountability.* In the definitions of these terms the attempt is made to conform their meanings with what has seemed to be their present preferred usage in the management field (accountants have used these words interchangeably). The word *accounting* itself becomes a primitive when we define it in terms of its relationship with the outside world, and for like reasons we can similarly class the basic notions behind *depreciation, transaction, capital, asset, liability, income,* and *expense.*

If we are to ascribe internationally consistent meanings to our concepts, we may profitably proceed by some easy steps to fundamental notions concerning the basic material of accounting. I feel certain we can all agree that this basic material is the *transaction,* and that the cause of a transaction may be an *event* or *condition.* We often refer to transactions generally, as events and conditions; events being purchases, sales, payrolls, services, deposits, withdrawals, and the like; conditions lead us to correct posting and other errors, provide for depreciation and bad debts, defer prepaid expenses, and accrue liabilities. We may even agree that a convenient term for an event is *external transaction,* and for a condition, *internal transaction.* I have used these terms for many years because they symbolize not only origins, but different orders of the managerial responsibility underlying them. In these days of linking accounting with management and

being unable at times to discover the border-line between them, we have good reason for this simple classificational distinction; each class is characterized by a different order or origins, authority, and timing. Closely related to these designations is the notion of *cost* (not cash) *flows*. The initial classification of a payroll (an external transaction) may be direct labor, but in the course of time it, or a part of it, after an adventurous journey through the accounts, may wind up in cost of sales — let us say by means of a half-dozen internal transactions. Our first designation can be called a *primary classification* in a *primary account* and the remainder a series of six internal transactions bearing *secondary classifications* and carried to *secondary accounts*. Nine of the underscored terms in this paragraph do not appear in our accounting texts; but their appearance in the *Dictionary* was designed to fill a number of the more obvious gaps.

While on the subject of devising names for the structural elements of the accounting process I believe we will have to extend our definition of *nominal* account, although I know of accountants who would like to abolish that term altogether. As I see it, the term is needed for any subdivision of a real account that is maintained during a fiscal period and joined with its mother account at the end of the period; cash collections from customers is an example. And still another need is the term *forward accounting* to embrace that interrelated and rapidly expanding area of accounting activity which is made up of standard costs, direct costing, responsibility costing (or what I believe might more accurately be called activity accounting), estimates of cash requirements, budgeting, and other elements involved in looking into the future.

Despite our unnamed and undefined concepts and despite the peculiar slants in terms developed by persons of different backgrounds, I have high hopes that these difficulties will not prove to be barriers to research projects having the same goals, to carefully defined concepts that we may share in common, to financial statements and reports that will mean the same in all languages, and to the continuous growth of professional wisdom that will bring accounting to its full realization as a major instrument of both management and social information and control.

INTERNATIONAL AUDITING

Challenges in International Auditing

JOHN W. QUEENAN*

Only the American and British accounting firms extend their practice to foreign soil to any great degree. This paper will relate primarily to the Americans, although there are many problems common to both American and British firms practicing on a world-wide basis. Differences in tax laws and legal systems in general, language barriers, different currencies, finding and training personnel, strong nationalistic feelings in many countries, differences in accounting principles and auditing standards, are illustrations of some of the common problems.

You might logically ask why auditors undertake to practice in a foreign country in the first place. The answer is that the accounting profession of any community exists because of the needs of business of that community for accounting and auditing services, and the accountant must be in a position to look after the needs of his client wherever in the world the client chooses to establish operations. You might also logically ask why it is not feasible for the accounting profession in any given country to attend to the accounting needs of any business operating there, whether foreign-owned or not. The answer is that when American capital (and British capital) began to go abroad shortly after the turn of the century, the accounting profession in most foreign

* John W. Queenan, a Past President of the American Institute of Certified Public Accountants, is the managing partner of the international accounting firm of Haskins and Sells. A graduate of the University of Illinois, Mr. Queenan has long been a leader in the accounting profession, serving both as a member of Council and as a member or chairman of important committees of the Institute. His papers have been published in the leading accounting periodicals of the United States.

countries had not developed to the point of being able to render proper services; this is still true of many countries today. Perhaps the overriding reason for the extensive international practice of American accounting firms is the attitude of American boards of directors who wish to look to one firm as having over-all responsibility for the entire engagement.

Naturally it will not be possible to go into the full range of problems the American firm encounters abroad, but I shall treat a representative number.

DIFFERENCES IN ACCOUNTING PRACTICES

The increasing volume of international investment, credit, and trade has resulted in increased attention to ways and means of achieving some desirable uniformity in international accounting practice. Regardless of the desirability of some international uniformity, we at this moment must face the realities: There *are* differences in accounting practices, and this is the area which I shall briefly describe.

1. Revaluation of Property

Up to the present time, the revaluation of property in the United States is not generally accepted as proper accounting, although it has some advocates in the accounting profession and the business community. Revaluation of property has become accepted practice in many Latin American countries, such as Argentina, Brazil, Chile, and Panama. In other countries, such as Mexico, Germany, and, to a certain extent, Canada, revaluation is permitted or accepted but is not too widely applied. It is accepted practice in Japan and common in France and Italy. To the best of my knowledge, Australia, Great Britain, and the Union of South Africa accept the theory, but write-ups are generally made only in connection with reorganizations. From these few examples, we see that there are many and varied viewpoints concerning the revaluation of property throughout the world.

2. Depreciation

In practically all countries mentioned where revaluation of property is accepted practice, depreciation is based on the restated property accounts for financial statement purposes and is an allowable deduction in determining taxable income. There are a few other differences between depreciation practices in some foreign countries and in the United States. In the Netherlands, for example, depreciation is provided on construction work in progress and it is considered permissible

to continue to provide depreciation on fully depreciated assets. In Brazil, depreciation is not always provided on buildings because it is not deductible for tax purposes. In Japan, in addition to normal depreciation, companies may set up arbitrary additional amounts when such amounts are allowable deductions for income tax purposes. It seems that tax law has a significant influence on depreciation policy in many countries.

3. Secret Reserves

The European businessman, and businessmen in some other parts of the world, believe very strongly that it is good business to set aside a part of profits in a good year for use in bolstering profits in a bad year, with the concurrence of the accounting profession in those countries. They cannot understand why the American businessman does not do the same thing.

Without doubt, inventories present the most fertile area for creating secret reserves. Except for the fact that LIFO is rarely used in other countries, there appears to be no major difference in the method of valuation of inventories between the United States and most other countries; the lower of cost or market is generally used. However, most European businessmen are quite ingenious when it comes to finding ways and means of writing down perfectly good inventories. Furthermore, several countries have permitted inventory reserves for income tax purposes.

In addition to the undervaluation of inventories, secret reserves are created by the arbitrary write-down of other assets, the unnecessary accrual of liabilities, and the creation of unneeded general reserves.

4. Accrual of Liability for Income Taxes

In a few countries, it is the practice to record income taxes when paid rather than to accrue them in the year in which the related income is earned. Brazil, Italy, Japan, and Switzerland follow this practice.

5. Stock Dividends

There are also differences in accounting for stock dividends between the United States and other countries. They exist with respect to both the issuing corporation and the recipient stockholder. First as to the issuing corporation: Under a Bulletin issued by the American Institute of Certified Public Accountants' Committee on Accounting Procedure in 1952, the issuing corporation should transfer an amount equal to

the fair value of the shares issued from earned surplus to the category of permanent capitalization (capital stock and capital surplus).[1] There is still much difference of opinion in the accounting profession about the views expressed in that Bulletin. The United States stands almost alone in thus accounting for a stock dividend. Most other countries, either because of requirements of law or common practice, require only that the par value of the shares be transferred to capital stock, and in many countries the offsetting charge can be made to earned surplus or to capital surplus arising from any source.

As to the recipient of a stock dividend, the aforementioned Bulletin takes the position that the stockholder has precisely the same interest in the issuing corporation as he had before the stock dividend was received and that he has realized no income. In many countries of the world, however, a stock dividend is regarded as income to the recipient; he is required to record it as income and pay taxes on it.

6. Charges to Earned Surplus

In many foreign countries there is no such account as "earned surplus" although a "profit and loss" account seems to have about the same general purpose. Furthermore, there does not appear to be as clear a distinction between income and surplus (or profit and loss) as in the United States. I have read reports, for instance, where such items as directors' fees and officers' bonuses are shown as charges to the equivalent of earned surplus. Such items are not accrued at the end of the year to which they pertain since there is no legal liability and no authority to record them, until they actually have been approved by the stockholders; and the stockholders do not meet until after the annual accounts are closed. Since these items are applicable to a prior year they are therefore charged to the "profit and loss" account when paid. In a few countries, such items are regarded in the same way as dividends — a distribution of profits. Also, I have observed a few instances where provision for bad debts is consistently charged to the "profit and loss" account. Thus, items normally considered ordinary operating expenses in the United States are never charged to operating expenses in some countries.

There are of course other differences between accounting practices in the United States and other countries but I have mentioned the more important ones. The existence of these fundamental differences

---

[1] *Accounting Research Bulletin No. 11* (Revised), see *Accounting Research and Terminology Bulletins, Final Edition,* New York, 1961, pp. 49-54.

naturally suggests the problem of properly bringing them to the attention of the reader of financial statements.

GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

The standard opinion used for many years by American CPA's states that the financial statements present fairly the financial position and results of operations of the company "in conformity with generally accepted accounting principles." This phrase originated in the United States and at first it was our view that any accountant using this expression in his opinion was referring to accounting principles in the United States. This view is no longer tenable because the same expression now appears in opinions in Canada and in a number of Latin American countries. An expression roughly comparable is also found in the opinion of the Japanese CPA. Accountants of still other countries may be using comparable language as well.

There is now the possibility that an informed reader of a report may be confused or even misled by the phrase, generally accepted accounting principles, unless there is proper disclosure of the basis of those principles. For instance, suppose a Canadian corporation with United States stockholders decides to appraise its properties and restate its accounts to reflect such appraisal. Since this is acceptable accounting practice in Canada, the Canadian accountant's opinion on the financial statements would use the expression "in conformity with generally accepted accounting principles." Unless there were full disclosure in the financial statements or notes thereto, the American stockholder might believe that the accounting principles are the same as those in the United States, or he might even get the impression that accounting principles are the same the world over.

As you probably know, the the International Finance Corporation (IFC), a sister organization of the International Bank for Reconstruction and Development (World Bank) makes investments and loans all over the world. Recently the IFC issued guidelines for accountants examining the financial statements of companies in which it has an interest. I understand that when the matter of suggesting the phrasing of the accountants' opinion was considered, the IFC wished to have it contain the statement that the financial statements presented fairly the financial position, etc., "in conformity with generally accepted accounting principles." At this point it was recognized that the use of this phrase created a problem since it has different meanings in different countries of the world. I believe that there would be many

cases where if this wording were used without some clarification, the IFC might well be misled.

Our firm holds this view: Good reporting requires whatever modification of standard phraseology is necessary to provide the American reader with an intelligent report. He must be informed wherein the accounting principles applied in the financial statements differ from principles normally followed in the United States. The opinion our firm rendered on a Japanese company that filed a Registration Statement with the SEC last year will illustrate our method of dealing with a situation where there was a difference in accounting principles. This opinion reads as follows:

"In our opinion, the accompanying balance sheet and related statements of income and surplus present fairly the financial position of the Company at November 30, 1962, and the results of its operations for the periods stated, in conformity with generally accepted accounting principles, which in Japan comprehend revaluation of properties as described in Note 2 to the Financial Statements, applied on a consistent basis."

Note 2 describes the circumstances in Japan, because of which, companies have been permitted by law to give accounting recognition to some extent to the loss in the purchasing power of the yen by revaluing certain of their properties upward and computing depreciation for income-tax purposes, and in the case of our client for rate-making purposes, on the higher amounts.

The wording of our opinion, together with the footnote disclosure in the financial statements, clearly informs the American reader wherein the accounting principles applied in the financial statements of this Japanese company differ from principles normally followed in United States.

FINANCIAL STATEMENTS IN COUNTRIES SUFFERING SEVERE INFLATION

Except for the occasional revaluation of property, the effect of inflation ordinarily is not shown in the financial statements of foreign corporations. However, for companies operating in countries experiencing severe inflation (such as Brazil and Chile), I believe that financial statements expressed on a price-level basis, giving effect to the decline in the purchasing power of the local currency, are in the circumstances more meaningful and are compatible with generally accepted accounting principles. The amounts shown in such financial statements are developed by applying a general price-level index to the historical amounts.

That such statements are more meaningful under extreme inflationary conditions, I believe few will question. However, some may question the view that they are compatible with generally accepted principles. Therefore, I shall mention briefly some of my reasons for believing this to be true. First, the primary purpose of generally accepted accounting principles is to provide criteria for fair presentation. A basis of presentation clearly accomplishing this purpose more effectively is, I believe, inherently compatible; conversely, it is inconceivable to me that generally accepted accounting principles could be interpreted to inhibit fair presentation. Second, the statutes and accounting practices of many countries recognize price-level adjustments of property, depreciation, inventories, and certain other accounts. Third, certain statements in official accounting literature in the United States imply that price-level statements are not incompatible with generally accepted accounting principles. For example, Chapter 9 of *Accounting Research Bulletin No. 43* states that: "Should inflation proceed so far that original dollar costs lose their practical significance, it might become necessary to restate all assets in terms of the depreciated currency, as has been done in some countries."

A few highlights from the financial statements recently issued by a Brazilian client of our Firm might be mentioned. They show clearly the impact of inflation and the contrast with statements presented on an historical basis. This client's plant was built principally in 1958 and 1959. The degree of inflation that has permeated the Brazilian economy since that time is indicated by the general price index used in preparing these statements. Here are the figures:

1958 — 229	1961 — 559
1959 — 316	1962 — 848
1960 — 407	1963 — 1,465

These indexes are annual averages; by December, 1963, the index had risen to 1,872. The net effect of such inflation is indicated by the fact that the client's financial statements for 1963 showed a net *income* of 145 million cruzeiros on the historical basis as contrasted with a net *loss* of 540 million cruzeiros on a price-level basis. A further interesting and sobering factor disclosed by these statements is that a substantial provision for income taxes was required because the tax laws do not give adequate recognition to the impact of inflation.

Our opinion on these statements is another interesting feature of this report. Insofar as I know, this report is the first one in which a

United States-affiliated firm has expressed an opinion that financial statements presented on a price-level basis are in conformity with generally accepted accounting principles. I believe the Netherlands' firm of Klynveld, Kraayenhof and Company has issued such an opinion on the statements of Philips Industries; and I think one or more United States firms have issued opinions in which the historical-basis statements have been said to be in conformity with generally accepted accounting principles, and in which a supplementary opinion has been expressed with respect to the price-level statements.

AUDITING STANDARDS

The American firms generally have no problems with respect to auditing standards since they apply auditing standards of the United States, as required by the American Institute of Certified Public Accountants. Because of the type of accounting records or local business practice, auditing procedures and techniques may differ at times from those employed in the United States. For instance, in most Latin American countries and in a number of European countries, canceled checks are considered to be the property of the bank and are not returned with the bank statements. Procedures for reconcilement of bank accounts, and for verification of disbursements, therefore, must be altered, but the standards remain the same.

In England and most other European countries auditing procedures differ in two important respects from those in the United States, namely, observation of physical inventory-taking and confirmation of accounts receivable. A number of the large Japanese companies have recently sold securities in the European money market. One of these companies inquired of our Tokyo office about whether United States or European auditing standards and procedures would be applied if that office should be engaged to conduct the audit. The answer was that United States auditing standards and procedures would be applied. In fact, United States auditing standards are applied in all our international engagements, regardless of jurisdiction.

TRAINING OF PERSONNEL

The international practice offices of American accounting firms have certain unusual problems in the employment and training of personnel. Apart from differences of language and commercial customs of many countries, there are restrictions on bringing in foreigners to staff practice offices. Many countries require that a certain percentage of the staff be nationals of the country in which the practice office is

located. Many of these nationals are already trained in the accounting and auditing procedures of their own country, but it is also necessary for them to be instructed in the accounting and auditing procedures generally accepted in the United States. This situation is usually met through special training courses, which often have to be conducted on a bilingual basis. Furthermore, our Firm's standard procedures with regard to audit working papers and programs have to be thoroughly understood by all our staff accountants.

As a general rule, the programs and working papers of our international practice offices are in English. Generally, this fact does not cause any great inconvenience, since English, for all practical purposes, has now become the commercial language of most of Africa and Asia and is a second language in Europe and Latin America.

In addition to the staff training programs conducted in our international practice offices for all employees, certain staff members from those offices are selected for intensive training in this country. The Secretary of State in Washington has designated our Firm to participate in an Exchange Visitor Program under which we may bring a number of trainees to our practice offices in the United States for periods of up to eighteen months. After that time they must return to their country of domicile.

The ability of an American accounting firm to offer adequate services to its clients abroad is only obtained after years of effort and training. The operation of a practice office abroad, it is probably correct to say, requires considerably more "know-how" than would be needed for a similiar practice office in the United States. Unfortunately, this circumstance is not widely appreciated within the accounting profession or among its clients.

CONCLUSION

This paper has given you, I hope, a general idea of the many problems encountered in practicing abroad as we have found them in our experience. Our international practice offices have frequently had to cope with incidents that would be unheard of in the United States, but since most of these situations arise from local conditions or incomplete understanding of the viewpoint of others, usually it is not too difficult to resolve them by informal discussion.

Our most important problem abroad is perhaps a permanent one. I would describe it as the necessity for our international offices to conform to United States standards. This makes it essential that any material deviation from these standards shall always be clearly disclosed in the reports issued by our international practice offices.

CONTEMPORARY THEORY PROBLEMS IN INTERNATIONAL ACCOUNTING

The Continuing Importance of Basic Concepts

A. C. LITTLETON*

In accounting as elsewhere, professional development needs continuing attention. Technical skills can be sharpened. Action types can be rationally explained. Concepts of objectives and of limitations can be clarified. In a continuing search for accounting principles perhaps the most promising springboard could be the identification of relevant, fundamental concepts. These could well serve as bases for formulating guiding principles which, in due time, could lead to improved accounting communications.

The contemporary research program of the American Institute of Certified Public Accountants has followed a different path — a path of deduction leading toward conclusions derived from assumed or postulated premises.

The degree of conviction carried by conclusions thus derived can reflect only the powers of conviction possessed by antecedent premises. If initial assumptions are weak or inadequately justified, the associated conclusions are not likely to be strong. Perhaps the use of an inductive approach could prove helpful. For example, conclusions as to the nature and limits of accounting technology could be reached by reasoning from particular facts known to be characteristic of accounting. Surely

* A. C. Littleton, Professor of Accountancy, Emeritus, University of Illinois, has had a long and distinguished career as an accounting educator with particular emphasis on the area of accounting theory. Professor Littleton is a Past President of the American Accounting Association. He has contributed many books and articles to the body of accounting literature and is a member of the Accounting Hall of Fame.

the characteristic objectives, distant and close up, would suggest principles capable of helping to resolve specific problems of accounting action.

An inductive approach would rest on the conviction that a significant aspect of accounting need not be assumed or postulated when it can be known as a fact. Starting from known facts and characteristics, research could move toward clarifying the functional limitations and objectives which condition technical actions. Back of these objectives will stand persuasive reasons justifying their existence.

Thus a chain of clarifying relations would be built: Discernible reasons justify functional objectives; the latter motivate known types of technical actions; a complex sequence of accounting actions eventually produces, for a given enterprise, certain compact accounting communications.

The financial statements which result will be technical communications of account data. But they will not be as readable as is a printed page. For this reason they will be difficult to interpret for many typical users of financial statements. Perhaps there is need also for research into the nature of interpretative techniques. An inductive approach, by reducing reliance on assumptions as the base, could clear a path for the formulation of principles to guide accounting actions and to improve interpretative techniques for extracting meaning from organized account data.

Assumptions and specific postulates might more usefully be brought into contact with imponderable elements not perceptible as data facts. In that association, assumptions could serve as ideological bases for reasoning toward probabilities. Clearly this kind of action poses a problem for management and investment analysts, not for accounting as such. Accounting function is not an imponderable. By the evidence of all its characteristics, accounting is equipped to deal with enterprise actual experience, not with expectations or probabilities. Research in compelling concepts and basic objectives might lay a useful base for improved data communications and thus for better understanding of the enterprise concerned.

The postulates recently formulated in *Accounting Research Study No. 1*[1] could be examined against this background.

It is scarcely necessary to postulate or assume that business activities and the associated accounting actions are carried on by self-contained,

[1] Moonitz, Maurice, "The Basic Postulates of Accounting," *Accounting Research Study No. 1,* 1961.

individually controlled entities (postulate A-3). These operating units of business have long been known to be facts of business life — and for known reasons. They make possible the division of labor and the specialization of managerial skills.

The accounting technology (postulate B-3) which serves business units exists as a fact of business life parallel to the entity as a fact of life. From this relation, it is clear that enterprise account data *must* speak for one enterprise entity. The reason for the emphasis is the need to make that enterprise and the results of management's decisions understandable to management itself and to other parties at interest.[2]

This kind of service from enterprise accounting need no more be assumed than "entity" need be postulated. Yet both concepts must be described, explained, and justified in their relation to each other. Those relations have reasons for being explained; these can be more enlightening than separate assumptions.

The same research publication takes note of a relation between active exchanges in the economic environment (A-2) and market prices reflected in accounts (B-2). Both items are stated as postulates, yet exchange of goods is an unquestioned fact of business life — a known and necessary characteristic, a fact, not an assumption. And there can be no doubt that transactions recorded in the accounts arise from price bargaining by interested parties in the markets.

In postulate B-2 this clause appears: "Account data are based on prices generated by past, present, or future exchanges." There is no place for so broad a generalization within the body of concepts making up the functional logic of accounting.

Look at these time segments more closely. The phrase "past exchanges" would quite properly cover all transactions generated by decisions made in the given enterprise. Acceptance of the phrase "present exchanges" would seem openly to justify extensive use of the current replacement prices even though these speak of other people's transactions.

"Expected to take place in the future" is a phrase which reaches still further beyond the actual experience of the given enterprise. Apparently the door has been opened for this postulate by the wide-spread acceptance of the practice of pricing inventory at the lower of cost or market — itself an expectation. Expectations do, of course, influence decisions. In order to serve that purpose, however, the possible future

[2] The fact would scarcely need elaboration that account data do not and could not provide all the information needed as a basis for business decisions.

need not, indeed should not, be brought into direct and modifying contact in the accounts with data from enterprise actual experience.

Expectations reported as items in the financial statements will too often seem to many readers to express real objectivity for the given enterprise. Yet these digits can only speak of elements which, for this enterprise, are subjective conjectures. Qualified expectations are judgmental opinions. Since these do not express our actual experience, such items are best treated as interpretative data supplementary to actual experience data.

The significance for accounting of periodic reporting is unquestioned. Its orientation runs toward management and investors as users of account data. For this reason, very little real explanation of periodic allocations and reporting can come from postulating that "economic activity is carried on during specific periods of time" (A-4).

In fact, both general and enterprise economic activities are essentially continuous, even when seasonal. Despite continuity of actions, or because of continuity, interested parties need to know, dependably and periodically, the results of management's decision actions. Direct observation and memory could perhaps serve some managements as a sort of alternative to data. But for the investing public, even this weak alternative is not available.

Because of these informational needs in the presence of continuing activities, it is essential that recording of accumulating experience data be continuous and that reporting be periodic. The time period used in accounting is, therefore, a practical necessity of business and not at all an assumption.

A postulated time period (A-4) has been linked with a postulated "tentativeness" (B-4), the latter referring to allocations over time of various operating results. Perhaps "tentative" is to mean experimental, subject to reconsideration, or to later correction. Or the term may conceivably mean to imply that accounting does not have scientific bases for its data allocations. The term may also carry certain overtones. For example: implication that allocation might be arbitrary or purely expedient; that allocations could be changed at management's discretion; that allocations could be strongly influenced by tax considerations, or by a need to present the best possible picture of financial solvency.

Accounting is not that tentative.

Quantification of transaction data (A-1) is a necessary feature of business, hence of accounting also. Financial statements (B-1) are also

a necessity, particularly in order to communicate to parties outside the enterprise. Surely these needs do not have to be assumed.

The reason account data in arithmetic digits can be helpful to business decisions is that they are identified with and can directly reflect management-generated transaction experience. Account totals and remainders are part of the "grammar" of figure language. It is unfortunate that this kind of communication is not as readable as is a verbal text. Few people are trained in figure interpretation as they are in word and sentence interpretation. Perhaps educators could work out ways for improving that condition without going so far as to make higher mathematics a required subject for everyone.

Financial statements (B-1) do not need to be postulated any more than does data quantification. The arrangements within those statements, the experience data there disclosed, the antecedent account categories for date classification — all of these are well-known communication devices. By their use, a multitude of separate events can be compacted into figure patterns of enterprise experience.

Thus understood, financial statements will be seen to lack the characteristics of assumptions. The building blocks in them are data from real events definitely relevant to this enterprise; the technical structure of these reports makes effective use of spatial organization of account data to enhance the "readability" of that picture of a section of enterprise transaction experience. These service functions need not be assumed; they clearly are matters of technical fact.

Accounting Research Study No. 1 includes a group of five postulates named "imperatives," that is, goals, standards, objectives related to accounting "as it ought to be." To the extent that the apparent synonyms above may be represented by one word, "objectives," each item in the list must be considered to refer to a guiding, limiting, controlling concept. Four of these have particular relevance to the usual financial statements.

The several imperatives named do include a number of influential objectives. But a more extensive list would be needed to cover all major objectives of varying degrees of influential significance. Beyond this would be a large number of minor objectives which influence subordinate actions. All of such objectives constitute the foundations supporting accounting technical actions and services. Apparently no "inventory" of these objectives has ever been undertaken.

An example of a broad objective influencing, perhaps dictating, accounting technical capacities could be stated this way: to make under-

standable the actual transaction experience of a given business enterprise. Behind a compelling objective such as this there stands a major objective of management, to review the results of prior actions as part of the preparation toward next decisions. Also influential for accounting is this financial objective: to report compactly to people in the investment community on enterprise financial status as of a given date, and on the operating results over a period of time insofar as status and results. These reports should be a reflection of data from enterprise actual experience.

Associated with these basic objectives should be recognition of the following as one of the compelling concepts exerting influence upon accounting actions: the integrity of data originating from enterprise transaction experience should be preserved in the accounts to the greatest extent possible. There are at least three reasons why this concept should persistently influence accounting.

1. Reported account data not thus protected cannot be depended upon faithfully to reflect enterprise actual experience or the results of transaction decisions taken by enterprise management.
2. Account data of doubtful integrity in these aspects, even in association with relevant non-account data, are not a reliable basis for future decisions.
3. Non-account elements, such as economic statistics and managerial judgments, should strongly influence future decisions. But the results would be more rationally based if they were also supported by analysis of significant factors made evident by enterprise prior experience.

Both the processing and the reporting of account data from transaction experience could be justified by considering the several "imperatives" as necessary, antecedent concepts, rather than as postulated assumptions.

Four of the five are of particular interest. These are Continuity (C-1), Objectivity (C-2), Consistency (C-3), Disclosure (C-5). These forceful names can headline significant aspects, not of accounting as it ought to be, but of the nature of accounting technology as it is known to be.

Continuity is a reasonable expectation based on experience in and observation of business. Enterprise operations can continue if conditions are met which are largely within management's responsibility: satisfied customers; expense plus cost kept below revenues; safe sol-

vency patterns maintained; good relations with capital sources and employees. Since reasonable continuity can result from proper efforts, it need not be assumed to be a characteristic.

Full disclosure in financial statements is an aspect of morality. *Objectivity* of account data also has moral connotations, for subjective data will lack reviewable validity. Consistency is particularly related to period-to-period comparability to aid interpreting reported experience data. It gives assurance that changes in reporting methods will be made evident to statement users.

These several concepts are reasonable, rational aspects of honorable management and honest communications. As such they may well be considered as imperatives for management as well as for accounting. It is not clear, however, why convincing goals and actions such as these should be named postulates. Acknowledged as rational characteristics of modern enterprise accounting, they seem, along with other basic and defensible characteristics, to deserve designation as *compelling concepts* capable of exercising vital influence on accounting actions and business activities.

Two other postulates have not been discussed above because they lack qualities which would entitle them to be considered as compelling concepts. These two are the dollar as a unit of measure (A-5) and as a stable measuring unit (C-4). Part of the reason they are not in themselves compelling concepts is that they set up *measurement* as a key function for enterprise accounting.

The major effect of this implied function is to divorce account data in some degree from enterprise actual transaction experience. To the extent this happens, the door will be opened to use of current replacement prices (these are considered objective and readily available "measures"), or the use in the accounts of price-level index adjustments (these index series are considered sufficiently objective because of governmental sponsorship).

In one of these situations, measurement would use selected market prices to which this enterprise had not been a party; in the other, account data would represent in some degree everyone's prices, with these prices statistically converted into a type of nationwide average. These two postulates are difficult to fit into a persuasive concept of accounting function, particularly if the function were considered to be provision of dependable and reviewable data about prior actual experience of the given enterprise.

Stability of the measuring unit, however scientific the phrase may sound, is a revolutionary idea for accounting use even though it is not new in economics and statistics.

Beneath these two measurement assumptions lie other assumptions, and the following may be questionable:

1. That accounting technology could expand its destiny by incorporating revolutionary changes;
2. That the digits attached to an exchange-priced transaction, once they are lodged in the accounts, no longer speak of quantitative facts out of actual and individual prior experience, but of an isolated item having quantitative individuality only as of a given moment of time — a mere speck in general economic price movements which were different before and continued to be different after the specific transaction. In contrast, it is to be noted that a given expenditure makes its short or extended contribution to enterprise purpose regardless of other people's prices before, in, or after the current market.

Thus two concepts appear to be in collision:

1. That accounting is concerned with one consummated transaction at a time, these in total consideration of actions (experiences) identified with the given enterprise;
2. That accounting should undertake to function as a device for measuring (valuing) enterprise resource changes, even though these are not identified with new transaction experience of the given enterprise.

The roots of the second of these concepts reach deeply into the soil of economic theory and statistics as a tool for analysis of economic change. For accounting, this concept would carry an implication that some data in financial statements should reflect directly the effects of new changes in economic conditions originating outside of acts of the given enterprise. Yet the basic character of accounting technology directs, not the measurement and reporting of economic equivalents, but the marshaling of data derived from specific transactions generated in and for a given enterprise by decisions of its own management.

These two postulates further imply that "to measure" includes the meaning "to value." The latter is more appropriate for economics or statistics than to accounting technology. Two quite different concepts of enterprise profit are involved here, one tied into actual transaction

experience (validated realization), one related to revaluations (effects of price-level changes). Some of the suggested postulates point thought toward the second concept. The functional logic of accounting technology points toward the first concept of profit as the more significant for dependable financial statement communications.

The first concept is supported not only by the functional logic of accounting but also by the fact that this early feature of accounting power, to make its technical contribution, has continued as a compelling concept. As long as the tight integration of real and nominal accounts continues to be a basic feature of enterprise accounting, this technology has no logical place for subjective valuations, for these would not be associated with overt action based on price bargaining in which this enterprise had been a party.

An asserted need for using "a stable measuring unit" follows from an assumption of "measurement" as the function of accounting. It is a serious matter to undertake to change function merely by changing definitions, especially when the present definition has been inherent and clearly evident throughout centuries of accounting growth in a service capacity.

Both early and modern technical aspects of accounting reflect an objective of producing an intelligible organization of enterprise transaction experience. This technology has evolved into the character we know because its elements proved able under use to provide a conceptual framework for making understandable the results of actual transaction events coming out of management decisions. The body of concepts underlying the use of that technical framework constitutes the essence of accounting theory. It would seem reasonable that this body of compelling concepts could best be derived from the empirical aspects of this technology — that is, from close examination of the historical and practical aspects of accounting actions and limitations.

This approach would be the converse of explaining accounting by starting with a controlling definition which would place *measurement* at the center of function. A better springboard could be found by considering the significance of inherent limitations. If no compelling limitations affect its technical actions, accounting becomes as flexible in its use of data as is statistical methodology. Increased flexibility could indeed produce useful data, but much of it would fail to reflect the actual experience of a given enterprise. As a result, the lessons to be read out of known experience data would be obscured. To the extent this would be the case, management would lose some of its opportuni-

ties to learn from transaction experience. Further, investment analysts would have to try to sort out injected interpretative data in order to read the original evidence of managerial effectiveness.

The action characteristics and natural limitations of enterprise accounting are logical consequences of men's need to gain knowledge of the results of prior decisions. Recorded and organized individual prior experience can supply the basic clues. This fact indicates a limitation which should be permitted to continue exerting significant influence upon this technology. There is, of course, no limit to the use of relevant, collateral, interpretative data outside the formal structure of enterprise accounting technology.

It is clear that accounting is not a philosophy leaning toward a deductive or syllogistical approach to conclusions. Nor is accounting a science where effective use is made of induction for drawing inferences from experimentation. Yet, because accounting is a technology, it stands somewhat closer to science. Hence an inductive approach might well be favored in its theory formulations in place of generalizations deduced from postulated assumptions.

Reasoning based on known characteristics and clear limitations would call for several lines of action:

1. Recognition or formulation of concepts of the most influential objectives of accounting.
2. Analysis of interrelations among concepts, among objectives, among actions, and among all three.
3. Search for persuasive reasons why accounting objectives can or cannot explain and justify specific types of accounting actions, positive or negative.
4. Close consideration of possible effects on accounting objectives and actions of concepts new to established patterns.

As science aids men to understand the forces of nature and then leads to use applications, so accounting theory should aid men clearly to understand and to use accounting techniques within the boundaries of their logical limitations. There would follow awareness of known action types in their relation to rational and justifying objectives. The essence of the functional logic of accounting lies within these relations.

Since the aim of research is to increase awareness and understanding, it would seem particularly appropriate to make use of induction in accounting research wherever possible, for this approach could guide the critical examination of both known and proposed concepts, to

the end of promoting useful generalizations about accounting action-types and their necessary limitations.

It could be especially useful to analyze the way objectives and limits (supported by cogent reasons) can and do condition one to explain accounting technical actions. Knowledge thus derived could serve as an excellent basis for a realistic reporting of actual experience — a basis which, no doubt, could prove more useful than one provided by chaining postulated assumptions toward the formulation of a few principles.

European National Uniform Charts of Accounts

KARL KÄFER*

INTRODUCTION

To speak at an International Seminar on accounting of European standard charts of accounts is opportune, because this is one of those topics which shows clearly how much the new Illinois Center for International Research in Accounting is needed. The subject was treated by practitioners and theorists in America and in Europe nearly without connection with the development on the other side of the ocean, although a mutual exchange of experiences and of theoretical considerations could have been helpful for both parties. I think that in many cases such a contact will be valuable in the future.

My following exposition cannot be more than a brief and incomplete sketch. You will find more in the books listed in the Bibliography. Unfortunately, the only modern American monograph on the subject I could find was the unpublished doctoral dissertion of Walter Stanley Palmer (17).[1]

I. HISTORY IN THE UNITED STATES

Recently our topic has seldom been mentioned in American books and journals. Most reference books and handbooks contain almost

* Karl Käfer is Professor of Business Economics and Accountancy at the University of Zürich. He is the author of many internationally known books, monographs, and articles, principally in the areas of cost accounting and accounting theory.

[1] See Bibliography on page 82.

nothing about it. This was not always the case. The early volumes of the *Accountants' Index* list hundreds of articles and pamphlets on the standard classification of accounts. Bently and Leonhard's *Bibliography of Works on Accounting by American Authors* (3) contains a supplement with a listing of publications on uniform accounting systems of not less than seventy-three pages. The subject was also discussed at the annual meetings of accounting bodies: in 1913, at the Annual Convention of the American Association of Public Accountants; in 1925, at the Annual Meeting of the American Association of University Instructors in Accounting (1); and in 1934 at the annual meeting of the American Institute of Accountants. At this last meeting, the reporter, Charles B. Couchman (7), did not show much sympathy for uniform accounting. I shall refer later to his objections.

In the twenties, the Chamber of Commerce of the United States and the Federal Trade Commission promoted the so-called standard systems of accounts and uniform cost accounting; they organized nationwide conferences on uniform accounting. Many years before, a number of trade associations had developed their own uniform charts of accounts. One of the oldest and best is the *Uniform Scheme of Accounts for Water Supply Enterprises,* published in 1910 by the American Water Works Association (2). Since it has several remarkable features, I chose it as the American counterpart to the European charts of Accounts (see Figure 2, column 1, pages 72 and 73).

It is interesting to note that the continental European evolution, including governmental help and propaganda, was anticipated in America by twenty years. But there are some differences. First, the uniform accounting systems in America and England were never enforced upon industry as they were in some countries of Central Europe and are now in Eastern Europe. Second, the national European standard systems are designated for all commercial and industrial enterprises, as a basis for charts of accounts of the major industries and then of the special branches of industry. These in turn are the basis for the charts of the individual businesses. Third, in America the theorists were not deeply interested in such uniform accounting systems. In contrast, there was always a great deal of scientific research and discussion on these subjects in Europe.

II. HISTORY IN GERMANY

Schmalenbach's Flow Chart

The book that inaugurated the whole movement was Eugen Schmal-

enbach's *Kontenrahmen* of 1927 (19). It was written by the most famous and influential accountant and professor of business administration in Central Europe. I can mention only a little of the rich content of his book; the literal translation of the title would be "framework of accounts." (See Figure 1, Outline of Schmalenbach's *standard chart of accounts* and his *flow chart*, pages 70 and 71.)

These flow charts form a very important part of both Schmalenbach's book and of the different books on uniform accounting systems for special industries which were published under his direction in later years. For Schmalenbach and his followers, these charts of accounts also served as a teaching device, a means to instruct a new bookkeeper in the office and an instrument for teaching in schools and universities. Instead of the well known "T-accounts," he uses figures: a rectangle for asset accounts, a triangle for liability and proprietorship accounts, and a circle for income and expense accounts and for summary accounts. A line going out at the right indicates a credit entry and a line coming in at the left, a debit. Dotted and broken lines leading to summary and income accounts are used for closing entries.

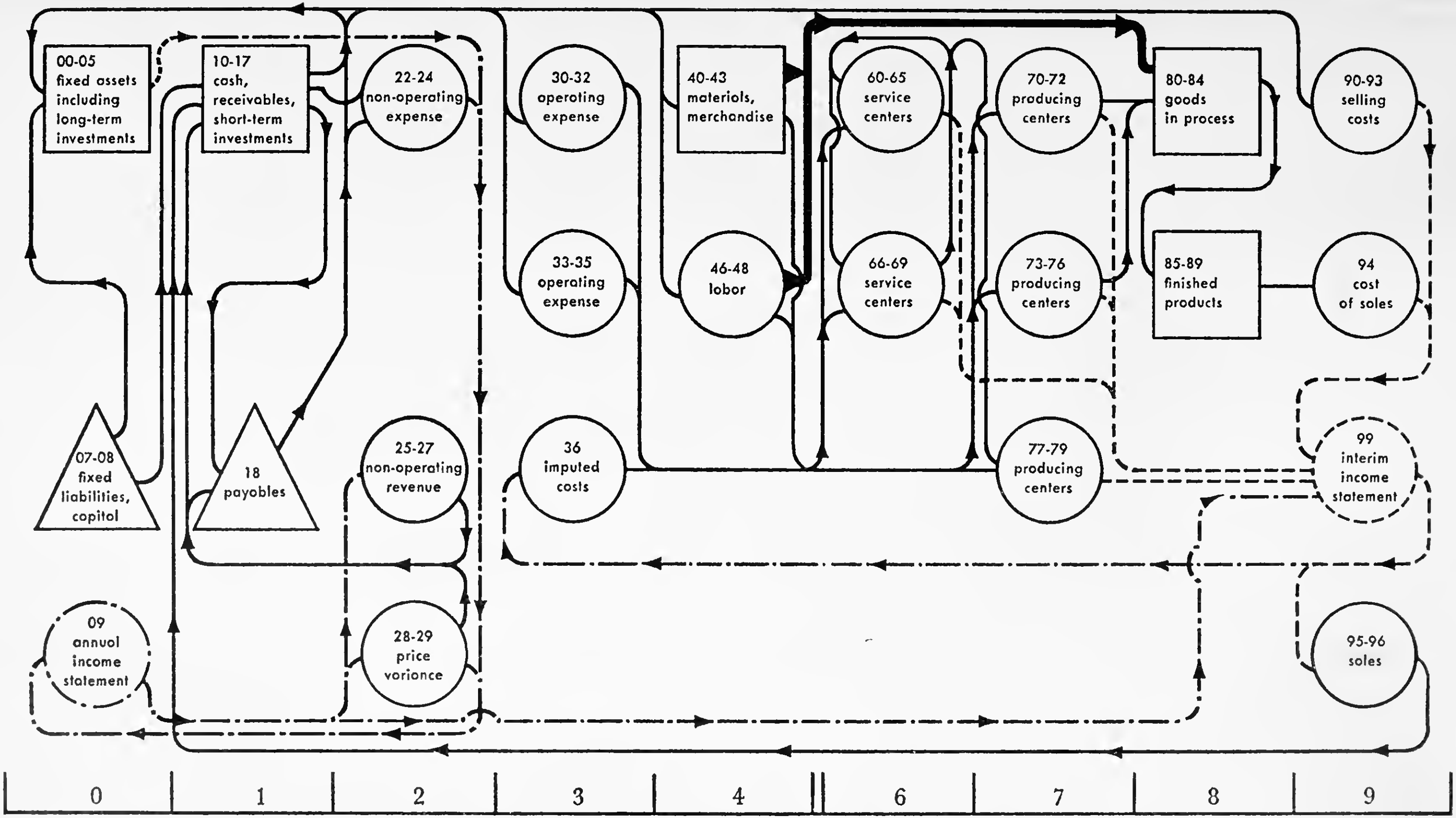
Schmalenbach's Uniform Chart of Accounts

The flow chart on the picture is inserted into the framework of Schmalenbach's standard chart of accounts. He divides all accounts in the first instance into "inactive accounts," which are seldom used during the year (class 0), and into "active" accounts with many transactions (classes 1 to 9). This distinction is not very useful and clear-cut; it was a demonstration that Schmalenbach regarded the practical considerations as the more important ones. He was soon criticized for this, and the classification into active and inactive accounts never again was used in other uniform charts of accounts.

Each of the classes 0 to 9 contains 10 groups of accounts; each group is denoted with two figures and contains up to 10 accounts and up to 100 subaccounts with three or four figures. Some of the groups of accounts are indicated on the flow chart (Figure 1). Class 0 contains: Group 00: land and buildings; group 01: machines, equipment, cars, and trucks; group 02: patents and rights, for example; group 04: long-term investments; group 08: share capital, undistributed profit (among others); group 09: the balance sheet account and the yearly income account (among others).

Figure 1. Schmalenbach's Standard Chart of Accounts

<table>
<tr><td rowspan="5">INACTIVE ACCOUNTS</td><td colspan="8">ACTIVE ACCOUNTS (ACCOUNTS WITH MANY TRANSACTIONS)</td></tr>
<tr><td rowspan="4">FINANCIAL ACCOUNTS</td><td colspan="7">ACCOUNTS FOR INTERNAL TRANSACTIONS</td></tr>
<tr><td rowspan="3">NON-OPERATING EXPENSE AND REVENUE</td><td colspan="6">OPERATING ACCOUNTS</td></tr>
<tr><td colspan="2">OPERATING COSTS AND EXPENSES</td><td colspan="2">COST CENTERS</td><td rowspan="2">PRODUCTS</td><td rowspan="2">SALES (COST, REVENUE, PROFIT)</td></tr>
<tr><td>OPERATING COSTS OTHER THAN MATERIALS AND LABOR</td><td>MATERIALS LABOR</td><td>SERVICE CENTERS</td><td>PRODUCING CENTERS (MANU-FACTURING, DISTRIBUTION)</td></tr>
<tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td></tr>
<tr><td colspan="3">FINANCIAL ACCOUNTING</td><td colspan="5">COST ACCOUNTING</td><td>FINANCIAL OR COST ACCOUNTING</td></tr>
</table>



00-05 fixed assets including long-term investments
10-17 cash, receivables, short-term investments
22-24 non-operating expense
30-32 operating expense
40-43 materials, merchandise
60-65 service centers
70-72 producing centers
80-84 goods in process
90-93 selling costs
33-35 operating expense
46-48 labor
66-69 service centers
73-76 producing centers
85-89 finished products
94 cost of sales
07-08 fixed liabilities, capital
18 payables
25-27 non-operating revenue
36 imputed costs
77-79 producing centers
99 interim income statement
09 annual income statement
28-29 price variance
95-96 sales
0
1
2
3
4
6
7
8
9

Figure 2. European National Uniform Charts of Accounts

Classes of Accounts	1	2	3	4	5	6	7
	U. S. A.	GERMANY			AUSTRIA	FRANCE	SWITZERLAND
	AMERICAN WATER WORKS ASSOCIATION 1910	SCHMALENBACH 1927	REICHSKONTEN-RAHMEN 1937	GEMEINSCHAFTS-KONTENRAHMEN 1949	ÖKW-EINHEITS-KONTENRAHMEN 1947	PLAN COMPTABLE GÉNÉRAL 1947 AND 1957	KONTENRAHMEN FÜR GEWERBE-, INDUSTRIE- UND HANDELS-BETRIEBE 1947
Class 0		inactive accounts (non-current assets and equities)	non-current assets and equities	non-current assets and equities	assets — non-current		
Class 1	fixed assets	financial accounts	financial accounts	current assets (excluding inventories); current liabilities	assets — inventories	proprietorship, reserves, long-term liabilities	assets
Class 2	floating and nominal assets	non-operating expense and revenue	non-operating expense and revenue; deferrals and accruals	non-operating expense and revenue; imputed costs	assets — cash, receivables, securities, accrued revenues, deferred costs	non-current assets	equities
Class 3	liabilities	operating costs (excluding materials and labor)	inventories	inventories	liabilities (current and long-term) accrued liabilities, deferred revenues	inventories	operating expense — materials

Class 4	proprietary interests	materials, labor	operating costs (excluding direct materials)	production costs (materials, labor, etc.)	expenditures — materials	receivables and payables	operating expense — labor and other
Class 5	operating revenues		imputed costs (materials, labor and other costs)		expenditures — labor	financial accounts	[cost accounting]
Class 6	operating expenses	service cost centers			expenditures — other (including non-operating expense)	operating accounts — cost and expense	operating revenue
Class 7	miscellaneous revenues	producing cost centers	products, in process and finished	products, in process and finished		operating accounts — revenue and income	non-operating expense and revenue
Class 8	miscellaneous expenses	products, in process and finished	sales and sales deductions	sales and other operating revenue	revenue (sales, etc., including non-operating income)	results of operations, profit and loss accounts (including non-operating revenue and expense)	summary and closing accounts (income accounts, balance sheet account)
Class 9	profit and loss allocation	sales (cost and revenue); interim profit and loss	closing accounts (income accounts, balance sheet account)	closing accounts (income accounts, balance sheet account)	proprietorship and closing accounts	cost accounting and cost analysis	

Class 1, financial accounts, contains the most frequently used accounts: cash and current receivables and payables. With class 2, "non-operating income," one approaches the classes for internal transactions, but class 2 is still a part of financial accounting. Cost accounting is the main object of classes 3 to 8. All expenses and revenues which are not connected with the normal operations of the firm are booked in the groups 22 to 27 and are transferred at the end of the year to the annual income account of class 0, together with price variances on acquired materials in case of a standard cost-accounting system.

Classes 3 and 4 contain the different costs accounted for by their nature. Class 4 is provided for materials and all labor cost, class 3 for all other kinds of cost. So-called "imputed costs" are booked on group 36, for instance, the salary of the owner of the business, the interest on the invested capital, perhaps the depreciation charge, which can be quite different from the amount booked in class 0. The dotted line connecting group 36 and 99 shows how these imputed costs are equalized at the end of the year.

Class 5 is void and reserved for special purposes. Classes 6 and 7 contain the accounts for service- and producing-cost centers. They are different according to the nature of the business. Schmalenbach did not recommend the use of normal accounts for them, but rather, a tabular *expense distribution and allocation sheet,* a device which is very popular in Central Europe.

The accounts for goods in process and finished products are contained in class 8 and sales, in class 9. Schmalenbach advises the preparation of monthly income statements; the broken lines symbolize the entries for such an interim profit and loss account.

This completes our discussion of Schmalenbach's famous standard system of accounts, which is shown once again, in Figure 2 (column 2). It was the basis for all later German uniform charts and influenced considerably the national charts of accounts of all other European countries. Schmalenbach states reasons, often based on practical considerations, for his plan. I do not think all of his arguments are valid, but nobody can deny that it was a remarkable beginning. Every serious study of uniform accounting in Central Europe must begin with Schmalenbach's work.

Two Other German Charts of Accounts

In the same illustration two other German uniform charts are shown. First, in column 3, the "Reichskontenrahmen of 1937." It was

the basis for some two hundred special uniform charts of accounts for the different branches of industry and commerce; these special charts were made compulsory in Germany, later in Austria, and in all other countries occupied by the Nazis. After World War II these charts lost their binding force. Several German organizations prepared a new chart, the "Gemeinschaftskontenrahmen of 1949" (column 4). If you examine the classes of accounts of all three German charts from 0 to 9 you see that there are some minor deviations, but the differences are more those of words than of substance. The most striking feature is that the cost accounting side was more and more neglected.

III. UNIFORM CHARTS OF ACCOUNTS IN AUSTRIA, FRANCE, AND SWITZERLAND

The next three national charts (all of the year 1947), the Austrian, the French, and the Swiss uniform charts of accounts, are in many respects different from the two German predecessors, and — as one quickly notes — similar to the American plan (column 1). They are easier to understand, because the basis is not the complicated flow of resources through the business, but the familiar distinction of accounts into balance sheet accounts, assets and equities, and income statement accounts, expense and revenue.

First: *balance sheet accounts.* The Swiss chart (column 7) has all assets in class 1; in the Austrian chart (column 5), they occupy class 0, non-current assets and inventories, class 1, inventories, and class 2, other current assets; the American chart distributes the assets to classes 1 and 2; in the French chart, column 6, they are in classes 2 to 5.

The equities occupy, in column 1: classes 3 and 4; in column 5: classes 3 and 9; in column 6: classes 1 and 4; in column 7: class 2. The only peculiarity which should be investigated is in the French chart, namely the combination of receivables and payables in class 4 (similar to class 1 of the three German charts).

Second: *income statement accounts.* It is natural to divide these into expense and revenue accounts. The expense accounts are assembled: on the American chart, in classes 6 and 8, and the revenues in classes 5 and 7; on the Austrian chart, expenses in classes 4 to 7, revenues in class 8; on the French chart, expenses in classes 6 and 8, revenues in classes 7 and 8; on the Swiss chart, expenses in classes 3, 4, and 7, revenues in classes 6 and 7. In this respect we observe an important difference between the Austrian system and all others: the Austrians have no distinction between operating and non-operating cost and revenue. This point too will be discussed later.

Finally: If we disregard the unimportant position of closing accounts, there remains a last noteworthy difference: the cost accounting side which is so prominent in Schmalenbach's chart is totally lacking in the American and Austrian charts; in the French chart, it occupies class 9; in the Swiss chart sometimes, but not always, class 5. This difference is also investigated later.

After this brief look at the different charts, one must now ask: what are the reasons for and against such uniform systems, and how should a standard chart of account be designed?

IV. WHY UNIFORM CHARTS OF ACCOUNTS?

The reasons for and against the standardization of accounting systems are manifold. We are all convinced that each business should have a good chart of accounts with precise instructions. The question is: can and should there be a general uniform chart as a basis for the individual charts?

Reasons Against

It seems best to begin with the unfavorable arguments and to answer them immediately.

Rigidity. "Uniform charts are an artificial imposition of accounts into a rigid form accompanied by rigid rules"; they are "a straight-jacket for an accountant." But this is not a necessity. May I quote an Australian voice (13, p. 138). "Despite their perfect coordination, the continental systems are admirably flexible, leaving freedom of movement within a wide common framework."

Lack of adaption to the kind of business. Certainly each trade is different. But all businesses have assets and equities, all must be financed, all produce and distribute their products. General charts are confined to those common facts.

Neglect of the necessities of the individual enterprise. Charles Couchman (7, p. 338) said at the aforementioned meeting of the American Institute of Accountants: "Systems cannot be drafted wholesale, but only after a thorough study of the individual firm." That is entirely true; but a good uniform chart gives every possibility for adaptation to the circumstances, also to the unknown "transactions of tomorrow." In any case, the Swiss chart provides ample space to add other classes and groups of accounts; for example, as seen in Figure 2, classes 0 and 9 are free.

Over-elaboration. To quote Couchman again (7, p. 333): "A chart that would provide all accounts that would be necessary would

reach a size far beyond the possibilities of efficient use." The answer was given a quarter of a century before, in the manual of the American Water Works Association: "All accounts are arranged in groups, subgroups, classes, subclasses, etc. . . . so that the number and kind of accounts may be adapted to each enterprise" (2, p. 39f). In addition, it is advisable to work out plans for several sizes of enterprise. The Swiss manual contains all accounts in four parallel columns according to the size of the business: first, the few accounts, suggested for a very small enterprise, and last the many accounts, suggested for a very large business. Between these fall the accounts for small- and medium-size firms.

The uniform chart as an instrument of control. In Western Europe the only state controller of private en erprise is now the taxation authorities' auditor. If he is not familiar with the accounting system, more time will be required for his audit.

High costs. This objection would not be raised when a new system must be introduced, but it can be raised in the case of an existing, satisfactory system. Then a change not only costs money but also causes the loss of valuable possibilities of comparison. In such a case, the author of the uniform system can only hope that its advantages outweigh the inconveniences of the change.

Obsolescence. Couchman (7, p. 356) says: "Uniform accounting is apt to be static . . . imagine a system, inaugurated fifty years ago." These objections certainly can be true. "Lack of progress is one of the more likely, although not inherent, defects of uniform systems." (17, Acc. Rev., p. 689) In this respect only one remedy exists: the authors of the uniform system must always be in close contact with the ever-changing world of business and must be bold enough to supplement and to alter the chart, if it is really indispensable.

Concerning the Swiss system, such changes had to be made for each new edition of my book. Accounts for new social security taxes were added; accounts for the use of cars and trucks, later on, were necessary even for small businesses, and so on. At the end of this short discussion of objections, I believe I can properly say, with Brunet (4, p. 88): "The objections cannot stand a profound and objective analysis of the problem." A uniform accounting system is at least a possibility. The following questions are then, is it not more than that, is it not desirable? What are the *reasons for* a standard chart of accounts?

Reasons For

There is no doubt that for corporations controlling a number of

plants, uniform accounting becomes one of the master keys to business economy and efficient management. In the case of a parent company and its subsidiaries, the principle of uniformity is essential also for meaningful consolidated statements.

The same is true if the items in the balance sheets or the income accounts of the firms of a state-controlled or state-inspected branch of the economy should be compared with each other or be combined. For example, such comparisons or combinations could be made with the items of the financial statements of railroads or insurance companies. For trade associations which intend to help their members by collecting, analyzing, and communicating statistical data, uniform accounting techniques are a necessity. The same is true for official statistics and scientific investigations of business situations and developments. If the results obtained on the level of the different associations should be combined in a general picture, a common, uniform chart of accounts is advantageous.

All accountants agree that the intelligent comparison of past and present costs and revenues of a business is a useful means for efficient management. A periodic comparison with the corresponding figures of similar firms can be of still greater value. But this is only possible if the accounts and their content are uniform. And again it is desirable that all charts of accounts be developed from a general plan, because for some comparisons the branch of industry or trade is not important. Again, the costs of using a truck are an example.

A well-conceived chart of accounts is a valuable part of the organization chart of an enterprise. The uniform charts and the subsidiary charts for special branches are models which contain a wealth of thought and experience; they are also valuable prototypes for those accountants who like to work with an accounting system of their own pattern. The introduction of a national uniform chart of accounts and the accompanying discussions demonstrated to many accountants the importance of a logically conceived accounting system.

If the normal level of these accounting documents is raised to those of the best standards in design, it would mean a general improvement in accounting systems to the benefit of individual enterprises and society at large.

Commonly-applied national charts of accounts are valuable tools for education and training of management personnel at all levels. An accountant changing employment from one company to another will find a very similar set of accounts and will be easily instructed. I men-

tioned before the usefulness of such a chart for teaching purposes, especially at lower levels of instruction. A last point: the work of external auditors is considerably simplified.

HOW SHOULD A UNIFORM CHART BE DESIGNED?

If we are now more or less convinced that a general framework for the individual charts of accounts of a great number of branches and enterprises is possible, and could be useful, the question remains, how should such a uniform chart be designed? As the accompanying illustrations show, the solutions are different, and some controversial views are to be investigated. I do not dare make an appraisal of the different European systems because I am too much a party to the affair. All I can do is to explain to you the reasons which were decisive for the special design of our Swiss chart.

General Requirements

It is easy to state a long list of general requirements for a good standard chart of accounts. It is not so easy to comply with them. The most prominent are the following.

Flexibility. This is the dominant quality required. The chart must be flexible, adaptable to the circumstances, and adaptable with equal ease to all economic units. It should be simple enough to be used by even the smallest business, extensible enough to allow for the needs of the largest concern, and flexible enough to be operated by any old or new form or method of bookkeeping.

Lucidity and distinctness. The chart must be simple and logical; it should be easily understood and readily become fixed in the memory. The terms and concepts must be defined in an unambiguous manner. The scope of each class, each group, and each account must be delimited clearly. The borderlines should be drawn in such a manner that the sums or balances of classes and groups are significant and important figures. Other desirable qualities could be named, but I prefer to devote my remaining time to the discussion of some differences between the European charts.

Differences of Content and of Classification

The most important question for the designer of a uniform chart is that of inclusion or exclusion of *cost accounting.* Cost accounting may be incorporated into the general chart (see Schmalenbach's plan, Figure 2, column 2), or the chart may keep the door open to its optional inclusion (see the French and the Swiss plans), or the uniform plan

may be confined to the financial accounts (see the American and the Austrian charts). Schmalenbach's system is, for many firms, cumbersome, complicated, and expensive to apply, if all parts are erroneously interpreted as components of one unit of double-entry bookkeeping. The Austrian reaction against this system is understandable, but I think it goes too far. The best solution, it seems, is to tie in cost-accounting in a way that does not disturb financial accounting, especially the closing of the books. It should be possible to include cost accounting, perhaps on separate cost sheets, or to dispense with it completely. The Swiss system contains (in class 5) an independent but complete chart of self-balancing cost accounts for the whole flow of costs, from acquisition costs, to production costs, to costs of sales.

The next question concerns the *principle of major groupings:* Should we arrange the accounts according to the principal transactions, namely, financing, acquisition of resources, production, and distribution (see the flow chart)? Or should we follow the long-used classification of the Interstate Commerce Commission and other American governmental bodies and groups, and distinguish the classes according to the financial statements in assets, equities, expense, and revenue? I believe that the latter form is best for the financial accounts and that the transaction sequence is suited for the cost accounting part. The logical place for cost accounting is probably between expenditures and sales, as in the Swiss chart.

A third fundamental question is as follows: Should we *distinguish between operating and non-operating expense and revenue,* or should we not? In Austria the authors of the uniform chart came to the conclusion that the financial accounting system should not be burdened with this distinction. But their arguments are not convincing. It seems unwise to postpone the separation of operating and non-operating items to the moment of cost calculation or of the closing of the books; it can be easiest and best done in the first moment of handling the documents and booking as is done in all other systems. It is interesting to see that as early as 1910 the authors of the American chart selected the same solution.

One of the important requirements is to provide for *meaningful sums and balances of classes and groups of accounts.* In this respect the Swiss chart avoids the combination of assets and equities or operating costs and revenue in one class. The question is whether, for example, the French class 4 (receivables and payables) and the German class 1 (financial accounts) do not have certain advantages. It is true

that some debtors sometimes become creditors and vice versa. Perhaps the French plan can facilitate the bookkeeping process a bit. Many authors of other charts thought that this little technical advantage had to be purchased too dearly by disturbing the logical order and content of the classes.

Formal Requirements

Last, I shall note some of the formal requirements of a good chart of accounts.

The classification symbols. The use of symbols for all accounts is necessary, not only for the use of some bookkeeping machines, but also to allow giving precise titles to the accounts, perhaps of many words, and to use instead of them the symbols. All charts listed in the illustration use decimal classifications, including the first one. Classes are indicated with one figure, subclasses or groups with two, subgroups or accounts with three, subaccounts with four figures. These symbols are flexible without limit and easy to memorize; ten classes, groups, or subgroups are seldom needed, but we can always use only a few. Some German authors hold that not having more than ten on the same level is not enough. But I cannot agree; it is a psychological law that an ordinary mind cannot be aware of more than five or six different things at the same moment. Therefore, no grouping of accounts should use a division into more than ten parts.

Other requirements. I mentioned some other formal qualities of a good chart before, for instance, a provision for enlargement; the house should have unoccupied compartments for unexpected guests. If, in an exceptional case, all ten subdivisions need to be used, the last (number 9) should always bear the title: Sundry or other. . . . This is a rule that was nearly always observed in the Swiss chart; the very few exceptions will be corrected on the occasion of the next edition.

CONCLUSION

I come to the conclusion of my very incomplete report on European charts of accounts. I deliberately mentioned only some national charts which have a comparatively wide area of application. There are many others, designed by special associations, as in this country, or proposed by accountants and scholars, without having extended application. Some organizations were active enough to propose continental or even international charts of accounts (5). But to this day their prospects are not very promising.

Bibliography

1 American Association of University Instructors in Accounting, Tenth Annual Meeting, December, 1925, "Papers and Proceedings on Uniform Accounting Systems," *The Accounting Review,* March, 1926, pp. 74-104.

2 American Water Works Association, *Report of the Committee on a Uniform Scheme of Accounts and Reports for Water Supply Enterprises,* New Orleans, 1910.

3 Bentley, Harry C., and Leonard, Ruth S., *Bibliography of Works on Accounting by American Authors,* Vol. 2: 1901–1934, with Supplement: "Uniform Systems," Boston, 1935, pp. 291-363.

4 Brunet, André A., *La normalisation comptable au service de l'enterprise, de la science et de la nation; objectifs et problèmes, solutions françaises et étrangères,* Paris, 1951.

5 Comité international des Professionnels de la Comptabilité; Commission d'étude du plan comptable international, *Le plan comptable selon différentes formes d'expression et son aboutissement international,* réuni et commenté par Marcel H. E. R. Mommen, 2 vols., Lausanne/Luxemburg/Brussels/Paris/Montreal, 1957.

6 Conseil National de la Comptabilité, *Plan comptable général,* Paris, 1957.

7 Couchman, Charles B., "Uniform Accounting for Industry," *The Journal of Accountancy,* November, 1934, pp. 333-357.

8 D'Ippolito, Teodoro, *La teoria generale e il piano-tipo dei conti della partita doppia* (piano contabile internazionale) (fourth edition), Palerma/Rome, 1959.

9 Gay, Edwin F., "Uniform Accounting Systems," *The Journal of Accountancy,* October, 1913, pp. 268-277.

10 Illetschko, Leopold L., *Der ÖKW — Kontenrahmen* (third edition, 1953), Vienna, 1947.

11 Käfer, Karl, *Kontenrahmen für Gewerbe-, Industrie- und Handelsbetriebe* (fourth edition, 1962), Berne, 1947. French translation: *Plan comptable général pour entreprises artisanales, commerciales et industrielles,* Lausanne, 1950. Greek translation, *Genikon Logistikon Planon,* Athens, 1959.

12 Kosiol, Erich, *Kontenrahmen und Kontenpläne der Unternehmungen,* Essen, 1962.

13 Lengyel, S. J., "Standardised Accountancy Considered Internationally," *Accounting Research,* Vol. 1, July, 1949, pp. 133-141.

14 Most, Kenneth S., *Uniform Cost Accounting and the Classification and Coding of Accounts,* London, 1961.

15 Münstermann, Hans, "Kontenrahmen," *Handwörterbuch der Sozialwissenschaften,* Vol. 6, Stuttgart, 1959, pp. 161-173.

16 Österreichisches Kuratorium für Wirtschaftlichkeit, *Der Einheitskontenrahmen für die österreichische Wirtschaft,* Vienna, 1947.

17 Palmer, Walter Stanley, "Uniform Accounting Systems; Their Scope and Significance," Ph.D. dissertation, Stanford University, 1954. University Microfilms No. 10382, Ann Arbor, Michigan. Abstract: *The Accounting Review,* October, 1955, pp. 688-689.

18 Scherpf, Peter, *Der Kontenrahmen; Entstehung, Verbreitung, Möglichkeiten,* Munich, 1955.

19 Schmalenbach, Eugen, *Der Kontenrahmen* (sixth edition, 1939), Leipzig, 1927.

20 Schulz, Carl-Ernst, and le Coutre, Walter, *Der Kontenrahmen; Gestaltungsgrundlagen und Änderungsvorschläge,* Berlin, 1948.

21 Singer, H. W., *Standardised Accountancy in Germany,* Cambridge, England, 1943.

An Appraisal of the Swedish System of Investment Reserves

SVEN-ERIK JOHANSSON*

The Swedish system of investment reserves seems to have aroused considerable international interest, particularly in the United States. This interest was specifically indicated by the late President Kennedy by his invitation to a group of Swedish experts on investment reserves in 1963. The purpose of this paper is to present a short description of the basic structure and functioning of the Swedish system and to make a tentative evaluation of the current experience with the system. The available space and time do not allow a thorough analysis of the details, but it is hoped that this paper will be informative on a broad basis.

HISTORICAL BACKGROUND

The present Swedish system of investment reserves was introduced in 1955 as a partial compensation for the loss of what was usually called, "free depreciation," i.e., the right of immediate write-off, for tax purposes, of the total acquisition cost of machinery and equipment during the year of acquisition.[1] During the period 1938–1951, Swedish

* Sven-Erik Johansson is Professor of Business Administration at the Stockholm School of Economics. He has published several books and numerous articles on problems of accounting and finance. During the academic year 1963-64, he was a Visiting Professor at the University of California in Berkeley.

[1] See Per V. A. Hammer, "Accounting and Taxation in Sweden in Relation to the Problem of Inflationary Profits," *Accounting Research*, 1950. Before 1955 there was an "old" investment reserve system which was not very successful for its purpose. See I. Scott and E. Mildner: "An Innovation in Fiscal Policy: The Swedish Investment Reserve System," *National Tax Journal*, September, 1962.

corporations enjoyed the tax advantages of free depreciation. After a few intervening years with provisional restrictions, Swedish business, with definite regret, was obliged in 1955 to say farewell to the joyful years of free depreciation. The main reason for the abolishment of this system was the inherent conflict between (1) the government's goal of pursuing a contra-cyclical and anti-inflationary investment policy, and (2) the effect of free depreciation on private business investments (which during the postwar period were financed internally to a very large extent and stimulated by the system of free depreciation, particularly during boom periods). Investment reserves were introduced with the hope that it would be an effective instrument for stimulating business investments when needed, but not otherwise. This system can be looked upon as a means of allowing — with certain restrictions — business enterprises the advantages of free depreciation on capital investments which are made during periods when the government wants to increase the rate of investment and employment, locally, or for the entire country. I hope that the following description, although it must necessarily be rather sketchy and does not deal with all the legal details involved, will give the reader an adequate picture of how the system functions.

In describing the system of investment reserves, it is appropriate to distinguish between (1) the creation of investment reserves, and (2) the disposition of these reserves.

THE CREATION OF INVESTMENT RESERVES

A corporation establishes an investment reserve by debiting the Profit and Loss account and crediting the Investment Reserve account. The allowance for this reserve is deductible for tax purposes, provided that an amount equal to 46 percent of the total investment reserve created is deposited at the Riksbank (the Swedish central bank). No interest income is received on this deposit. The sum may, in fact, be viewed as a tax payment, which is refundable under certain conditions. The 46-percent rate has been deliberately chosen in such a way that it should be slightly below the corporate tax rate (approximately 50 percent). Thus, the creation of an investment reserve gives only a small advantage in terms of liquidity (i.e., a tax reduction of 50 percent less the "provisional tax payment" of 46 percent, deposited at the Riksbank). In this connection it should be noted that only corporations and certain types of cooperative organizations are permitted to estab-

lish investment reserves.[2] The maximum annual allowance for the most common type of investment reserves is 40 percent of the profit before taxes and before the allowance under consideration.[3]

THE DISPOSITION OF INVESTMENT RESERVES

Accounting, Liquidity, and Profitability Aspects

To use an investment reserve for its purpose simply implies that a depreciation of a maximum of 100 percent of the acquisition cost of a new investment, e.g., in buildings or machinery, is charged the investment reserve account during the year of acquisition. This depreciation is not deductible for tax purposes, but rather the company is permitted to withdraw the deposit (of 46 percent of the reserve utilized) in the Riksbank, and, furthermore, to make a special "investment deduction" in the tax return equal to 10 percent of the reserve utilized. The total liquidity effect is approximately the same as the one obtained by "free depreciation." It should be observed, however, that the company may not make any normal deductible allowances for depreciation of an investment, which have been written off in the way described above. The tax savings from normal allowances for depreciation will thus be lost.

The improvement of the profitability of an investment when written off by using the investment reserve method instead of being subject to normal tax depreciation is illustrated in the following example which is based on the following assumptions:

(a) The investment reserve is used for a building with a cost of acquisition of 100
(b) Rate of normal tax depreciation (straight-line) 2.5%
(c) Tax rate 50%
(d) Cost of capital (after tax) 8%
(e) Net present value after tax is used as a profitability index.
(f) Taxes are paid at the end of the year.
(g) The cash returned by the Riksbank is received at the beginning of the year during which the investment is made.

---

[2] For cooperative organizations, which are of minor economic importance compared to corporations, the tax rate is 40-45 percent and the deposit required 40 percent. The discussion here deals primarily with corporations.

[3] There are also reserves for investments in forests for which the maximum allowance is 10 percent of the gross income. These reserves have played a minor role and are not discussed in this paper.

Increase in the Net Present Value of an Investment in a Building for which the Investment Reserve Is Used

	Present value
Cash returned by the Riksbank (46 × 100)	46.0
Tax saving from the special "investment deduction" (.5 × .1 × 100 × .926)	4.6
Loss of tax savings from normal tax depreciation (.5 × .025 × 100 × 11.925)	(14.9)
	35.7

The net present value is thus increased by 35.7 percent of the initial investment. Obviously, the higher the last item, the smaller the increase in the present value. At a normal tax depreciation rate of 20 percent (which is one of the standards used in Sweden for machinery and equipment), the net advantage (in terms of present value) of the disposition of the investment reserve is reduced to 10.7 percent of the initial investment.

Restrictions on the Use of Investment Reserves

Hoping that the section above has given the readers some idea of the accounting and economic aspects of the disposition of investment reserves, I shall now try to answer the questions of how and when an investment reserve may be used.

The Swedish tax regulations under consideration specify the different types of investments for which an investment reserve may be used. There is no reason to go into the details of these regulations. It is sufficient to say that traditional business investments in buildings, machinery, and equipment are included. It may also be of interest to note that special (and rather complicated) rules have recently been added concerning investments in inventories.

It is of course consistent with the purposes of this system for the Swedish government to decide when the companies will get the opportunity to utilize the investment reserves which have been created. A permit, usually granted by the Labor Market Board (Arbetsmarknadsstyrelsen), is required. There is, however, one important exception to this rule. The law states that the companies are free to use 30 percent of an investment reserve within five (sometimes four) years after the reserve was set up.[4] This portion of the reserve is usually referred to in

[4] In this case, however, the special "investment deduction" of 10 percent is not obtained.

Sweden as the "free sector." It was introduced by the government as an extra stimulus for the creation of investment reserves.

The permit mentioned above can be given in many different ways. One alternative is to grant a general permit for all the firms which have set up investment reserves. The permit can, however, be restricted to certain industries or local areas, where the rate of employment is expected to be low. Another alternative is to grant permits by approving individual applications, specifying the projects for which the applicants wish to use the investment reserves. (This method was used during the regressions of 1958–59 and 1962–63. It was also used in 1963–64 when permits were restricted to investments in the northern part of Sweden.) Under special circumstances a permit may be given in connection with the creation of an investment reserve and even apply to reserves not yet established. It is important to observe that there are always time restraints involved, in the sense that only capital expenditures which are incurred within a specified (future) time period may be charged to an investment reserve account.

From the viewpoint of the government, of course, the problems are to decide (a) when to grant permits and for what period, (b) what the maximum amount of permits (in terms of capital investments) should be, and (c) how to make the allocation between the applicants. There is always a risk that the granting of permits will be initiated too late (to allow the companies a reasonable period of planning) and that the permits to some extent will prove effective only after the end of a regression period. Experience in these risks was obtained in 1958 when the investment reserves were used for the first time.

To provide a more concrete picture of the functioning system of this, I will give a short description of the use of investment reserves in 1962–63.

The Use of Investment Reserves in 1962–63

At the beginning of 1962, when the existing total investment reserves were approximately 2,300 million Swedish Crowns, the Labor Market Board advised those Swedish enterprises with existing investment reserves to take into consideration a possible utilization of investment reserves in their planning for the year ahead. In April, 1962, it was noted that there was a great risk of increasing unemployment within the building construction industry, particularly during the winter, 1962–63. In May of the same year, it was announced that the Labor Market Board would welcome applications from individual companies

for the right to use their investment reserves for investments in buildings. One condition was that the project should be started before November 1, 1962. Furthermore, the investment reserves could only be used for capital expenditures incurred before May 1, 1963. Permits were given to 554 companies[5] to utilize approximately 700 million Sw. Crowns of the investment reserves (i.e., about 30 percent of the existing total reserves). It is estimated that the labor force engaged in these projects during the winter, 1962–63, was 25 to 30 percent of the total labor occupied by private investments in industrial buildings.[6]

One important question is this: To what extent were permits granted for investments which would have been carried out during the same period in any case? The answer to this question is obviously crucial for an evaluation of the effectiveness of the system.

At the Stockholm School of Economics, we have tried to investigate the effect of the utilization of investment reserves on the investment planning in thirty of the companies which utilized their investment reserves in 1962–63.[7] The final report on this study has not yet been published. The following preliminary highlights of the study, however, may be reported:

1. In about fifty percent of the interviewed companies the investment reserves were used for investments which would have been carried out during the same period in any event. The cash returned by the Riksbank did not have any noticeable effect in terms of additional investments. The reasons were either that the companies had a satisfactory liquidity or that the additional cash was of a relatively small size.

2. Approximately fifty percent of the companies reported that the investments, for which the investment reserves were used, were carried out at an earlier date than they otherwise would have been.

Although the results obtained do not allow any generalizations, it is interesting to observe that where the use of the investment reserves has had any effect on investments, it has been mainly in relation to their timing.

---

[5] This is approximately 30 percent of all the enterprises which had investment reserves in the balance sheet at the end of 1961.

[6] See C. Canarp, Investeringsfonderna — ett konjuktur — och arbetsmarknadspolitiskt instrument, *Skandinaviska Bankens Kvartalstidskrift,* April, 1963.

[7] This investigation has been carried out by Mr. Hans Edenhammar.

AN EVALUATION OF THE SYSTEM

It is difficult to make any final evaluation of the present Swedish investment reserve system. First, it has been in use for less than a decade. Its experimental nature is obvious since the system has been revised rather frequently since its introduction in 1955. More empirical research on the effects of the system is required. Thus, any evaluation must necessarily be rather tentative and hypothetical.

I believe the following hypotheses to be reasonable:

1. The system has stimulated a higher rate of investment in periods when permits have been granted to utilize existing investment reserves (but it is impossible to give any quantitative effects).
2. The effect has mainly been on the timing of investments which implies a realization of investment plans at an earlier date. (This may, in fact, be what the government considers to be most desirable.)
3. The reserves to some extent are used for investments which would have been carried out in any case.
4. The tax incentive involved is greater, the smaller the rate of normal tax depreciation is. Thus, the system will have a much greater effect on investments in buildings than on investments in machinery and equipment.
5. One limitation of the system is that it can be used as an investment incentive only for firms which — on a voluntary basis — have set up investment reserves. (An investment reserve is usually created only when all other means of reducing the taxable income have been exhausted, and thus is, to some extent, a function of the profitability of the individual firms.[8]

Finally, I shall close with a few remarks concerning the accounting aspects of the investment reserve system. I can well imagine that an American accountant might be shocked by the obvious distortions of the financial statements through the existence of investment reserves. In Sweden one will not find such a reaction. An investment reserve is looked upon as one additional distortion, which may be of minor importance in comparison with others already existing, e.g., "secret" reserves

[8] Some have suggested that the present investment reserve system, with its implicit tax subsidies and its rather complicated administration, should be replaced by explicit subsidies designed to increase corporate investment during slumps and paid by the government. See L. G. Sandberg, "Comment on 'An Innovation in Fiscal Policy: the Swedish Investment Reserve System,'" *National Tax Journal,* March, 1963, and "A New Look at the Investment Reserves," *Ekonomisk Tidskrift,* March, 1964.

in inventory or machinery (which are fully disclosed). The user of financial statements in Sweden has always found it necessary to make several adjustments of the reported income figure and other financial data before he can make a meaningful analysis. The more liberal the tax rules are, the less useful become the financial statements when tax accounting and financial accounting go hand by hand.

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING OF THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION
PAUL M. GREEN, Dean

The Center for International Education and Research in Accounting was established to foster the international development of education and research in the accounting discipline, to provide a base for the international exchange of ideas and materials relating to accounting education, to encourage and assist both accounting faculty personnel and students from other countries to come to the University of Illinois for study and research in accounting, and to provide faculty members for assignment to universities in other countries.

The Center, functionally and administratively, is a constituent part of the Department of Accountancy and the College of Commerce and Business Administration of the University of Illinois. The graduate training of a substantial number of international students has been an important activity of the Department for many years.

One of the specific goals of the Center is the publication of reports, booklets, and monographs which further the cause of advanced education and research in accounting.

V. K. Zimmerman, *Director*

INTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

VOLUME 1, NUMBER 2, SPRING, 1966

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

UNIVERSITY OF ILLINOIS, URBANA

V. K. Zimmerman, *Editor*

The International Journal of Accounting *Education and Research* is published semiannually, spring and fall, by the Center for International Education and Research in Accounting, College of Commerce and Business Administration, University of Illinois. Subscription rates are $3.00 per year. Single copy price is $1.80. Copies of the first issue are still available.

Manuscripts and communications for the Editor and business correspondence should be addressed to **The International Journal of Accounting** *Education and Research,* 320 Commerce West, University of Illinois, Urbana, Illinois 61801.

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

Volume 1 · Number 2 · Spring 1966

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING
UNIVERSITY OF ILLINOIS · URBANA

Contents

The International Flow of Accounting Thought

NORTON M. BEDFORD*

An essential characteristic of all professions seems to be the striving to be international. Few escape the confines of their political and national boundaries, yet the striving goes on. Caught in the dilemma of wanting to conform to the legal and cultural pressures of his country and at the same time seeking to advance the performance of the function justifying the profession, the professional has sought to do both. He has sought to incorporate as part of his professional body of knowledge every development, regardless of the country of origin, which might improve the capacity of his profession to perform its function in society. Then he has tried to adapt this new knowledge to the political and cultural requirements of his country. Let us explore this situation.

It seems to be well recognized that the justification for and social acceptance of a profession is that the members of that profession can do something for other people better than people can do it themselves. Implicit in this justification is the assumption that the professional possesses knowledge, normally acquired by long periods of study, which the nonprofessional does not have but which the nonprofessional needs to have applied to his problems. Further, the status of the professional seems to be related directly to the extent of the knowledge required to perform the particular function of the professional and the need of

* Norton M. Bedford, Professor of Accountancy at the University of Illinois, has held many important committee assignments for the American Institute of Certified Public Accountants, the National Association of Accountants, and the American Accounting Association. He is the author of *Income Determination Theory,* co-author of *Advanced Accounting,* and author of numerous articles in leading professional and scholarly periodicals.

society for the performance of that function. Thus, the medical profession enjoys high status because the practice of medicine requires an extensive body of knowledge and because the need for the medical function in society is a very important need. The point is that there are practical reasons, in the sense of normal motivations, which will cause a profession to utilize all possible knowledge, regardless of its origin, if that knowledge advances the status of the profession. In addition, some recognition must be given to man's thirst for knowledge which may cause a professional to seek new knowledge, regardless of its origin, just for the sake of knowledge.

A UNIVERSAL PROFESSION

It is submitted that accountancy is a profession and that accountants will therefore seek constantly to acquire new knowledge about means of improving the performance of the accounting function in society. The question under review is the determination of the process by which basic accounting knowledge and new accounting developments in one part of the world are transmitted to other parts. This transmigration of accounting knowledge has been substantial, unless one assumes similar developments occur automatically in each country of the world, for there exists a loosely bound body of international accounting thought. Common throughout today's world is the accountant, the *comptable,* the *contabili,* the *contador,* the *Wirtschaftsprüfer,* the *revisor,* and the *logistic* — all professionals practicing accountancy. The concept of an independent audit is also well established, though the meaning of the concept varies somewhat from country to country.

If accountants throughout the world, as a professional group, seek constantly to develop new means for improving the accounting function, and if new discoveries are made in different parts of the world at different times, and if these new developments may have applicability in other countries, then it seems appropriate to suggest means for implementing the international flow of accounting concepts. Historically, the process by which accounting procedures and thought have been transmitted from one country to another has been by the physical transfer of accountants. For example, Scotsmen have been placed in all areas of the earth to do the accounting called for by trading firms. In the latter part of the nineteenth century, British accountants came to the United States and developed both accounting and public auditing. In modern times, however, this physical transfer of the man with the accounting knowledge is not as effective as it once was, particularly where a language barrier exists.

It has been suggested that accounting practice follows business and as business goes to foreign countries, accountants of the home country follow the business to do the accounting work.[1] But the fact that investments from abroad have to be accounted for in a prescribed way is not evidence that the foreign country will adopt the accounting procedures of the home country. In fact, an examination of the practice of most of the large, English-speaking international accounting firms indicates that, in the main, international practice is largely confined to accounting for the subsidiaries of British and American international business firms. Accounting work for national business firms continues to be performed by national accounting firms. Although the international firms endeavor to overcome this reluctance on the part of national business firms to use their services, progress has been slow. Governmental directives, emotional ties to national pride, the language barrier, and a variety of other factors discourage widespread use of the services of international firms. Personal contacts do, from time to time, allow for an exchange of professional points of view. But this process is slow.

INDICATORS OF PROGRESS

Sensitive to the need for a greater exchange of accounting knowledge, accountants developed an international congress to meet every five years. Professors of accounting now travel from country to country seeking new developments in accounting, and students attend foreign universities. But for the mass of accounting, the language barrier, the political barrier, and the cultural barrier effectively impede the international transmigration of accounting thought. Just as the "printing barrier" prior to the development of the printing press curbed the transmission of knowledge of double-entry bookkeeping to the Hansa towns of Germany and delayed the economic development of these areas, so now the profession must address itself to the barriers of language, politics, and culture if maximum economic progress is to be realized.

---

[1] Theodore L. Wilkinson, "United States Accounting as Viewed by Accountants of Other Countries" *The International Journal of Accounting*, Fall, 1965, states, "Accounting principles of one country have moved to another country when two conditions have existed:

1. The second country had no organized body of accounting principles in the first place, and
2. Large amounts of capital from the first country were invested in businesses in the second country, with the consequent ability on the part of those investors to impose their own accounting requirements on the businesses."

One must be impressed with the systematic manner in which the international profession has organized itself to do this. Conferences have been the main result. Last December, the Fourth Conference of Asian and Pacific Accountants met in New Delhi. All sessions were conducted in the English language, which seems to follow the gradual emergence of English as the international language of business. Similar meetings have been held by European accountants and Inter-America accountants. Of particular significance have been international conferences of accounting educators. Future international conferences on accounting education are now proposed in conjunction with the 1967 International Congress meeting and with the 1968 New Zealand meeting of Asian accountants. Books have been written on international accounting. Broadly, it is possible to discern a growing, though somewhat disconnected, organizational framework for the international transmission of accounting information. But organization alone is not enough. Appropriate technical information must flow. An unlimited transmission of details of accounting and bookkeeping practice may not involve the international flow of accounting thought. An illustration of this distinction is available in the form of an international meeting of accountants of two countries. The topic discussed was depreciation. After two days of meetings, each member in attendance was fully aware of the details of bookkeeping procedures followed in each country. But an exchange of different accounting concepts did not result until an accountant of one country asserted that the primary purpose of depreciation was to maintain capital. An accountant of the other country then explained that in his country the purpose of depreciation was to trace the flow of services from an asset. The discussion which followed changed the level of the meeting completely. Discussions then turned to concepts of repair, of income, of control, and of motivation. Only then did an international flow of accounting thought occur.

It is, of course, the international transmigration of accounting thought, not accounting practice alone, with which the accounting profession should be concerned. This is so for two reasons:

1. Practice tends to follow from concepts, and a common understanding of concepts will result ultimately in a common understanding of accounting practice.
2. Accounting practice, at any one time, may be imbedded in the laws and business customs of a country to such an extent that immediate change is not within the realm of possibility.

Activities in other fields, particularly the physical sciences, indicate that an international flow of developments in fundamental concepts can be highly developed. In the social sciences, also, a substantial international flow of basic concepts takes place. The lagging areas are the applied social science fields, such as law, government, accounting, and business.

THE ROAD TO AN INTERNATIONAL EXCHANGE

From these considerations emerges the proposition that the proper process for transplanting accounting developments from one country to another is to provide for the exchange of ideas about basic accounting concepts rather than about accounting practice. To the extent that the body of knowledge known as accounting thought is abstracted as conceptual generalizations, international flows are augmented. This does not deny that international flows of accounting practices will occur, but the point is that until all members of the international profession have a common understanding of their role in society, the assumptions upon which economic activity rests, the nature of human economic motivation, and the validity and usefulness of common measurement methods, there can be no highly integrated international profession of accountancy. To those who contend that a highly integrated international profession is not wanted and is not desired, one can only point out that they then have the responsibility of establishing the degree of integration that is wanted. Some integration is clearly being demanded by the profession. The problem is one of degree, and whatever the degree of common knowledge wanted for the international profession, some transmission of basic concepts is essential.

The transmission of concepts or the basic thought underlying the practice of a profession is, of course, much more difficult than merely translating the accounting practice of one country into the language of another country. It is an educational, not a training process. Generally, it is better performed by universities than by members in practice. It requires, like all theory, more systematic transmission methods than mere conveyance of information, for understanding is the essence of it.

Before analyzing methods for transmitting this abstract body of accounting knowledge from one country to another, it may be appropriate to reinforce the proposition that this type of international transmigration of accounting thought is needed by the profession. First, note that in historical perspective no profession can attain a status

higher than the body of knowledge which supports it. Unless a profession, or craft for that matter, is based on a sound technology not in the hands of the public, that profession will lose status if its technology becomes a part of the common knowledge of the general public. This means that to exist as a high-level international profession, accountancy will have to constantly expand its technology in order to retain its distinctive professional status. While the ability to perform the bookkeeping function may once have bestowed upon the accounting profession a well-respected status, it was not until responsibility for the audit function was accepted that accountancy came to be considered a high-level profession. There is now emerging a new area of responsibility for accountants — the highly refined function involving the measurement and communication of all types of economic data. To all these three areas the international body of accounting thought must be related if the profession is to be recognized as a very important profession of modern society.

THE ROLE OF RESEARCH

Returning to the problem of international exchange of professional thought, it seems evident that there is a need for a highly developed research interest in accounting in order to stimulate international exchanges. The work needed is at the theory level, and this can be developed only by fundamental research on accounting concepts. This type of research involves study at the level of measurement theory and at the basic social science level. Normally, researchers interested in this level of study would be university-educated men well qualified in research methods, interested in new economic measurement and communication methods, and operating at such an abstract level that the national, political, and cultural bounds would not influence accounting thought. An ideal organizational arrangement for this type of international transmission of accounting thought would be an internationally financed international research center. The center could draw researchers from all parts of the world. But this would not be enough. There would be a need for universities throughout the world to include this international body of thought in their curricula, possibly as part of the social science area, for dissemination to students. International journals directed to conceptual matters would have to be established to augment interest in the international effort.

This proposal for the international transmigration of accounting thought rejects efforts for an international association of accountants

as a necessity for an international profession. It also rejects the idea that the profession must have international accounting firms. These may or may not develop as an aside to the fundamental objective of developing an international body of accounting thought upon which the profession of accountancy would rest. Then and only then will effective international transmigration of accounting thought be realized, as it is now realized in the basic sciences.

Stated in negative form, the proposal set forth is that the language, political, and cultural barriers are so strong that unless an international body of accounting thought is developed, effective international transmission of accounting practice is not possible. Only by developing an abstract body of accounting theory which researchers and scholars can discuss outside the boundaries of the three barriers will the international profession of accountancy be realized.

Comparison of Consolidated Financial Statements in the United States and West Germany

PETER SWOBODA*

PERSPECTIVE

The new German corporation law became effective in September, 1965, concluding more than ten years of extended discussions of various drafts. Since this law contains more rigorous regulations concerning consolidation practices than for any other European country, it may be instructive to compare its provisions with the principles of accounting generally accepted in the United States of America (USA) and the Securities and Exchange Commission (SEC) requirements referring to consolidation practices.

It should be kept in mind throughout this paper that the basic regulations concerning financial accounting in Germany are specified by law and not by accounting principles. The provisions of the law, however, are supplemented by accounting principles. Usually some section of a specific law refers to these principles. For example, Section 149 of the new corporation law states that the financial statements must be prepared in accordance with the principles of proper accounting. Furthermore, there might be a significant difference between German and American accounting principles. The prevailing opinion in the USA seems to be that valid accounting principles must have substantial authoritative support. This implies that some procedure can become

* Peter Swoboda is a Professor of Business Administration at the University of Frankfurt. He earned a doctorate of Business Administration from the Hochschule für Welthandel in Vienna. Professor Swoboda taught at this school and at the University of Illinois prior to his present position. He has written the book, *Die betriebliche Anpassung als Problem des betrieblichen Rechnungswesens,* as well as many articles.

generally accepted just by pronouncement by the American Institute of Certified Public Accountants (AICPA) or a similar organization regardless of whether it has or has not been followed in practice prior to the pronouncement.[1] The German principles of proper accountancy, however, are rather those adopted by honest firms provided they are not contradictory to the law. As a matter of fact, in the past years most audit opinions as well as textbooks did claim that secret reserves should not be created. But since it was considered good practice by honest businessmen to accumulate such undisclosed reserves, German auditors could not refuse certifying financial statements because of extensive secret reserves. At least in this case, the practice of businessmen apparently could not be changed either by education or by auditor counsel. The practice was changed, however, by enforcing new statutory regulations.

Up to 1965, consolidated statements were not required and usually were not prepared in Germany. Because principles of proper accounting must first arise from practice, German principles referring to consolidation and supplementing the law obviously cannot yet exist.

COMPANIES SUBJECT TO CONSOLIDATION

The second part of this paper concerns considerations which are pertinent for determining whether or not companies must submit consolidated statements, and whether or not the financial statements of a subsidiary should be included in the consolidated statement. To understand the German regulations, one should recall that there are two major types of German companies with limited liability: (1) the corporation, and (2) what could be called the private company or partnership with limited liability. Most sections of the German law are only applicable to corporations. This distinction is important in defining the principles of consolidation.

German corporation law specifies that a business enterprise is a combination of a parent company with subsidiaries if and only if integrated administration or control of the companies exists. A company, a majority of whose stock is owned by another company, is considered to be a part of that concern. But majority ownership is not a necessary precondition (Sections 17 and 18) to indicate control. Only if the controlling company is incorporated is it obliged to prepare con-

[1] See for example, Grady, Paul, "Inventory of Generally Accepted Accounting Principles in the United States of America," *The Accounting Review,* January 1965, pp. 23 and 24.

solidated statements. All majority owned domestic companies, whether incorporated or not, must be included in the consolidated statements of the parent. Economically insignificant subsidiaries and those whose inclusion would adversely affect the significance of the consolidated statements are omitted (comparable to American practice). On the other hand, non-majority owned domestic companies controlled by the concern must be included if their inclusion is essential for the analysis of the financial condition of the parent concern. Foreign subsidiaries may or may not be included (Section 329). If the parent company is not incorporated and does not voluntarily prepare consolidated statements and has subsidiaries which are incorporated, the subsidiaries next in administrative rank to the holding company which are incorporated must submit consolidated statements reflecting the consolidated financial status of all additional subsidiaries but not of the parent company (Section 330). The many domestic and foreign holding companies in Germany which are organized as private companies with limited liability cannot, therefore, be forced to prepare and publish consolidated statements.

There is a major difference between the German corporation law and the American views in that the SEC permits only consolidation of majority owned subsidiaries.[2] This rule, which is favored by the AICPA,[3] generally excludes the many cases in which control is exercised with far less than 51 percent stock ownership,[4] for example, the case where a parent company has the ability to elect a sufficient number of the directors of a subsidiary. The reason why consolidation criteria in Germany cannot rely entirely on the degree of voting stock ownership is that the German Corporation Law permits controlling contracts (*Beherrschungsverträge*) between companies without the prerequisite of majority ownership (Section 291). It would not be meaningful, however, to consolidate a company controlled by means of a contract if only a small percentage of the voting stock of the subsidiary is owned. Since in this case the minority interest would assume a very large part of the subsidiary's assets, the consolidated statement could become misleading.

Concerning the remaining regulations, the American and German views differ only little. The SEC probably does not insist on consolidated statements for a subsidiary which is in a business very different

---

[2] Rappaport, L. H., *SEC Accounting Practice and Procedure,* Second Edition, New York 1963, p. 15.2.

[3] AICPA, *Accounting Research Bulletin 51.*

[4] For exceptions see Rappaport, pp. 15.9, 15.10.

from that of its other affiliates[5] or for an economically insignificant subsidiary. SEC regulations also permit the inclusion of foreign subsidiaries, but if such subsidiaries are consolidated, disclosure should be made of the effect of foreign currency restrictions.[6]

If the accounting period of subsidiaries differs from that of the consolidated statements, German subsidiaries must prepare special balance sheets covering the exact period of consolidation (Section 331, No. 3). Therefore, under the German law a difference in closing dates cannot be used for evading consolidation. Under SEC regulations, however, subsidiaries may be consolidated only if the difference in closing dates is not more than 93 days and if certain additional conditions are met.[7]

CONSOLIDATING PROCEDURES — INVESTMENTS IN SUBSIDIARIES

All modern theories of consolidated statements agree that investments in subsidiaries are to be eliminated and the assets of the subsidiaries substituted for them. In the USA, the details of this procedure differ according to the date of consolidation in relation to the date of acquisition. Consolidated statements prepared at the date of acquisition will be discussed first.

A parent company may pay more than, less than, or exactly the book value for the stock it acquires. If there is a payment in excess of the book value, it is generally accepted practice to allocate the difference between the purchase price and the share in the net assets acquired to tangible and specific intangible assets, if possible. If the difference is allocated to depreciable assets, it should then be absorbed by amortization over the remaining life of the assets. Likewise, when the cost of the investment is less than the book value acquired, it is appropriate to assign the difference to specific assets, with corresponding adjustments of depreciation and amortization. Only to the extent that these

---

[5] Rappaport, pp. 15.8, 15.9.

[6] Rappaport, p. 15.3. Rules for the conversion of foreign account balances as in the USA do not exist in Germany. (See AICPA, Restatement and Revision of Accounting Research Bulletins, pages 113 and 114, in *Accounting Research and Terminology Bulletins,* Final Edition, New York, 1961.)

[7] Rappaport, p. 15.2. Also, a survey by the AICPA (*Accounting Trends and Techniques,* eighteenth edition, 1964, pp. 143, 144) indicates that, of 561 American companies having subsidiaries, only 112 companies consolidated all domestic and foreign majority owned subsidiaries, and further, 194 companies consolidated all domestic subsidiaries. More than forty percent of the companies did exclude some or all domestic subsidiaries of consolidation referring to various considerations.

differences cannot be attributed to specific assets may they be reported as positive or negative goodwill items. Positive goodwill may be and negative goodwill normally would be reflected in the income account in subsequent years. To credit capital surplus with the amount of negative goodwill is not considered acceptable practice.[8]

For preparing consolidated statements subsequent to the date of acquisition two methods can be used.[9] The most accepted method is to carry the investment account at cost. When this method is used, only dividends from earnings retained before the acquisition of control or a permanent loss should be recorded as items decreasing the investment account. Consequently, the investment account should not be adjusted if subsidiaries report profits or losses or declare dividends. Since the ratio between the parent company's investment and the net assets of the subsidiary is subject to changes, reciprocity is to be established prior to consolidation. This is done by increasing or decreasing the retained earnings of the parent company. In most American consolidated statements one thus finds that reciprocity at the time of acquisition is established by revaluations and/or positive or negative goodwill amounts. In subsequent years the original revaluation amounts and goodwill items are maintained (if not amortized) and supplemented by the adjustment of the retained earnings of the parent company (and the minorities' share in the retained earnings). This procedure is not explicitly required by the SEC, but firms are requested to set forth the differences between the investment in a subsidiary and the parent's equity in the subsidiary's net assets as of the date of consolidation in a footnote, and to explain the treatment of this difference.[10]

Some American companies, however, record their investment in a subsidiary by adjusting it whenever the subsidiary records a profit or loss, or whenever dividends are declared (equity method). In this case the retained earnings of the parent company normally need not be changed to obtain reciprocity.

The minority interests in the subsidiary can be revalued according to the revaluation of the majority interest (entity theory) or they can be reported according to the data in the balance sheet of the subsidiary. In any case, the SEC requires that the minority interest in capital and

[8] *Accounting Research Bulletin No. 51;* see also Rappaport, p. 15.7.

[9] For American procedures see, for example, Bedford, N. M., Perry, K. W., and Wyatt, A. R., *Advanced Accounting — An Organizational Approach,* New York, 1961, pp. 231-497.

[10] Rappaport, pp. 15.13, 15.14.

in retained earnings (including profits) must be shown separately.[11]

If one compares the German regulations with these American practices it is at once apparent that German accountants must record the investment accounts at cost. German commercial laws generally do not permit accountants to state assets at more than their cost. This implies also that the assets and liabilities of the subsidiaries must appear on the consolidated statement at exactly the same value as that at which they are carried in the statement of the subsidiaries. Neither revaluation upward nor downward is allowed. Furthermore, the German law does not distinguish between consolidated statements at the date of acquisition and subsequent dates. Each year, reciprocity is established by determining the differences between the investment account, carried at cost, and the book value of the share in the net assets of the subsidiary. This difference is shown as positive or negative consolidated goodwill. Therefore, if it is assumed that the first consolidated statement after acquisition shows a positive consolidated goodwill of consolidation of 20,000 DM and that the wholly owned subsidiary retains earnings of 10,000 DM each year, the consolidated statements will record goodwill amounts of 10,000, 0, −10,000 DM and so on in the subsequent years.[12] This method implies that the earned surplus amount on the individual balance sheet of the parent is identical to that of the consolidated earned surplus. The same procedure is also applied if subsidiary stock is purchased subsequent or prior to the acquisition of control, if subsidiary stock is sold, or if there are mutual stockholdings or indirect ownerships. The date of acquisition and the earnings after this date are meaningless for German consolidation procedures (Section 331, No. 1). German law permits credits to the credits investment account of the parent for permanent losses of the subsidiaries or dividends paid from income that was realized prior to the date of acquisition.

A further implication of the German rules is that investment in unconsolidated subsidiaries cannot be adjusted by including the controlling company's share in the subsidiaries' net income. Such an adjustment is accepted by the SEC[13] and favored in *Accounting Research Bulletin No. 51,* though cost continues to be the most commonly used

[11] Rappaport, pp. 15, 16. The minority interests in profit must be stated separately in the consolidated income statements.

[12] Obviously, such a goodwill cannot be amortized.

[13] Rappaport, p. 15.10. The SEC demands at least a disclosure of the difference between the parent's investment and the book value of the stock if statements of unconsolidated subsidiaries and 50-percent owned companies are to be filed (p. 15.15).

basis for carrying investments in unconsolidated subsidiaries or in jointly owned associated companies in the USA.[14]

Concerning the statement of minority interests, the German regulations allow a combined statement of capital and surplus attributable to minorities. The minority interest in profit or loss, however, must be shown separately in the consolidated balance sheet as well as in the consolidated income statement (Section 331, No. 1).

A comparison of the consolidation principles required by American accounting official opinions and the new German corporation law reveals that German auditors have a much easier task as far as the treatment of the parent's investment account is concerned. It is generally contended in Germany that revaluations would make the comparison between individual statements and consolidated statements more difficult and, furthermore, could give rise to undue manipulations of the consolidated statements. The author believes that the German regulations are more reflective of the entity theory than the American principles which seem to reflect the proprietory theory. In Germany, book values assigned to assets by a subsidiary are binding for the consolidation, since valuation procedures of the subsidiary in most cases are controlled by the parent. The concern as an economic unit cannot apply measures of valuation different from those of its members. There is only one exception (discussed in the next section) and that concerns the valuation of assets containing intercompany profits.

Example: The differences between American and German consolidating procedures as to the elimination of the investment account can be seen below.

Data: Assume that A has acquired a 60-percent interest in B on January 1, 1963. The cost of the investment was $200,000 and B's net worth as of that date was $210,000. The balance sheets of A and B as of December 31, 1965, are as given.

A
Balance Sheet
As of December 31, 1965

Net assets	$700,000	Capital stock	$500,000
Investment in B	200,000	Retained earnings	300,000
		Profit–1965	100,000
	$900,000		$900,000

[14] *Accounting Trends and Techniques, op. cit.*, p. 72.

B
Balance Sheet
As of December 31, 1965

Net assets	$300,000	Capital stock	$100,000
		Retained earnings	170,000
		Profit–1965	30,000
	$300,000		$300,000

The consolidated balance sheets based upon American rules (cost method) and upon German rules are:

A
Consolidated Balance Sheet
As of December 31, 1965
(according to American rules)

Net assets	$1,000,000	Capital stock	$ 500,000
Goodwill of consolidation (or revaluations of specific assets)	74,000	Retained earnings	454,000
		Minority interest	
		in capital	40,000
		in retained earnings	80,000
	$1,074,000		$1,074,000

B
Consolidated Balance Sheet
As of December 31, 1965
(according to German rules)

Net assets	$1,000,000	Capital stock	$ 500,000
Goodwill of consolidation	38,000	Retained earnings	300,000
		Consolidated profit	118,000
		Minority interest	
		in capital and retained earnings	108,000
		in profit	12,000
	$1,038,000		$1,038,000

Reconciliation of Differences

	In consolidated balance sheet	
	as to American rules	as to German rules
Goodwill of consolidation	$74,000 = cost of investment minus share in B's shareholders' equity at the *date of acquisition* = 200,000 – 60% of 210,000 this amount should be assigned to specific assets, if possible.	$38,000 = cost of investment minus share in B's shareholders' equity (except profit of the last year!) at the *date of consolidation* = 200,000 – 60% of 270,000 this amount must not be assigned to specific assets.
Retained earnings	$454,000 includes the retained earnings and profit of the parent, and the parent's interest in the subsidiary's retained earnings since acquisition and in the subsidiary's profit.	$300,000 identical to retained earnings of the parent; does not include the profit of the last year.
Consolidated profit	$0 the consolidated profit is part of the consolidated retained earnings.	$118,000 includes the parent's profit and the parent's interest in the subsidiary's profit.
Minority interest	$120,000 the minority interest in capital (40,000) and in retained earnings, including profit (80,000) is shown separately.	$120,000 the minority interest in capital plus retained earnings (108,000) and in profit (12,000) is shown separately.

CONSOLIDATING PROCEDURES — INTERCOMPANY PROFITS

While the German law is not interested in a very technically refined elimination of the investment account, it is particularly precise as to the elimination of intercompany profits. The American and German

principles and procedures concerning the elimination of intercompany profits are contrasted in this section.

Accounting Research Bulletin No. 51 maintains that all intercompany (gross) profits or losses that are unrealized from the viewpoint of the affiliated group as an economic unit should be eliminated. They may be allocated proportionately between the majority and minority interests. SEC regulations require, in general, the elimination of intercompany items and transactions. If they are not eliminated, an explanation for the different treatment must be given.[15] As discussed by Rappaport, firms can abstain from eliminating intercompany profits and transactions if they believe that they are immaterial or if they report the amount of intercompany profits or transactions in a footnote.[16] It seems, however, that intercompany profits very often are not eliminated in American consolidated statements.

Section 331, No. 2, of the German corporation law requires that the value of inventories which entirely or to some extent were supplied by affiliates must not exceed what the full cost would have been if the affiliated group had been a separate, independent corporation. It is permissible to value goods in process and finished goods at direct cost. This implies that all intercompany (net) profits in raw materials, goods in process, and finished goods and commodities are to be eliminated. This procedure must be applied also for all other assets whose acquisition was not part of regular business activities. Therefore, only fixed assets or securities which are acquired within regular business activities may include intercompany profits. There is no doubt that the eliminated intercompany profits should all include the share of the minority interests. But the law does not explain whether the minority's share is to be charged to the profit of the parent or to that of minority. If the parent company is the selling party, it seems proper to assign the eliminated intercompany profit only to the profit of the parent. If, however, a subsidiary is the selling party, there is good reason to assume that the eliminated profits may be attributed proportionately to the parent and the subsidiaries. There are suggestions in the American literature that intercompany profit be eliminated directly by reducing retained earnings.[17] This procedure cannot be followed in Germany since the consolidated profit must appear separately on the consolidated balance sheet. Intercompany losses in processed goods need not be eliminated

[15] Rappaport, p. 15.16.
[16] Rappaport, pp. 15.16, 15.17.
[17] Bedford, Perry, Wyatt, *op. cit.*, pp. 333-38.

if these goods are valued higher than or at direct cost. Intercompany losses in commodities must be eliminated, except in cases where the market price is as low as the original value minus intercompany loss.

If sales are made to unconsolidated subsidiaries, intercompany profits need not and in most cases must not be eliminated. This is contrary to the views of *Accounting Research Bulletin No. 51* which states that intercompany profits, if material, should be eliminated or at least disclosed in such a case.

The reason why the German corporation law is rather specific as to the elimination of intercompany profits can be found in one of the most characteristic features of the new law, i.e., the tendency to provide extensive protection for the minority interests in subsidiaries. Tax law provisions often make it extremely advantageous to pool profits and losses among subsidiaries. When pooling of income is agreed upon or when controlling contracts are concluded, the minority interest is given particular protection. The parent must offer the minority interests a fixed annual dividend that is based on the effective earnings of the subsidiaries in the past and present and on the probable income of the subsidiary in the future. This rate cannot be decreased in the case of losses. In calculating this fixed dividend, it must be assumed that no earnings are retained. The payment of this rate can only be avoided if the parent company assumes the responsibility to pay to the minority interests of the subsidiary dividends which have a fixed and appropriate relationship to the dividends paid to the parent's shareholders. In addition to those provisions, the contract of income pooling or controlling entitles the shareholders of the subsidiary to sell their stock to the parent company, in some cases in exchange for shares of the parent company, in some cases for an appropriate amount of cash (Sections 304 and 305).

If controlling contracts were not agreed upon with the affiliates, German law does not permit the parent company to use its influence to persuade the directors of the subsidiaries to actions that would be disadvantageous to the subsidiary, except when the disadvantages would be compensated by other advantages. This refers especially to the determination of prices for intercompany transactions. Therefore, the parent company generally may not buy from an affiliate at prices below the market price and may not charge an affiliate prices above the market price. The board of directors of the subsidiary is obliged to prepare an annual report on the relations between its company, the parent, and the other affiliates of the parent. This report must give

detailed information on the advantages and disadvantages derived from all intercompany transactions. Also, the financial statements included in this report must be certified to by independent accountants. (Sections 311-318).

It is clear, however, that not all economic disadvantages possible to minority stockholders can be disclosed by the mere elimination of intercompany profits. But in some cases, minority stockholders may be able to evaluate the amount of intercompany profit eliminated. To appreciate this point, it must be realized that in addition to the consolidated statements of the parent, the individual statements of all affiliates (if they are corporations) must be published. Since the arrangement of German consolidated and individual statements must be identical and must conform to the form given in Section 151, and since assets must not be revalued, a particular item in the consolidated statement must correspond to the sum of the amounts of this item in all individual statements, minus the intercompany profit. Shareholders, therefore, may get some significant information on the relationship between market prices and prices for intercompany transactions if they are aware of the quantity and the importance of intercompany transactions and may be able to use this information in the protection of their interests.

CONSOLIDATED PROCEDURES — TREASURY STOCK AND MUTUAL STOCKHOLDING

The German law contains no regulations concerning the consolidation procedures for treasury stock or in cases of mutual stockholdings. In fact, the statutes do not suggest any detailed consolidation procedures except those discussed in the previous sections and the elimination of intercompany receivables and bonds (Section 331, No. 1). One general German accounting procedure, however, should be mentioned in this context. Unlike accounting principles in the USA, the German regulations definitely prohibit the deduction of treasury stock from the net worth since the reduction of capital stock requires a formal decision of the stockholders which entails the cancellation of the treasury stock (Section 237). Treasury stock must appear as an asset on the balance sheet. In the author's opinion, this is also applicable to mutual stockholding between parent and subsidiary, but not between subsidiaries. The investment of a subsidiary in the parent company must be shown as treasury stock in the consolidated balance sheet. This procedure is also recommended in *Accounting Research Bulletin No. 51.*

An interesting problem in German consolidation procedures can arise in the case of mutual stockholdings. Section 19 of the Corporation Law states that if there are mutual stockholdings and only one company owns a majority interest, this company shall be considered as the controlling company. If, however, both companies are majority owned by each other, or are influencing each other to an equal extent, both companies must be considered to be controlling companies as well as subsidiaries. It is not defined how consolidation should be accomplished in this case. There seem to be three different ways: (1) to choose either of the companies as parent with respect to consolidation; (2) to establish two consolidated statements, each showing one company as parent and the other company as subsidiary; or (3) to prepare a consolidated statement attributing the total net assets only to the minority interests of both companies.

Mutual stockholdings are somewhat restricted in Germany. After establishing a concern, a company and its subsidiaries may buy stock of the parent company only in order to prevent serious damage to the company and only if all affiliates together do not have more than 10 percent of the parent's stock in their possession (Section 71). But, if the mutual stockholdings were acquired by the companies before becoming affiliates, no shares must be sold (as is the case in France).

Whenever a company has acquired more than 25 percent and/or more than 50 percent of the stock of a corporation, it must inform the management of the corporation of its investment (Section 20 and 21). This new regulation was thought necessary because common stock in Germany is normally issued to the bearer. Consequently, the board of directors may not know and very often does not know the identity of the corporation's stockholders at a given time.

CONSOLIDATED INCOME STATEMENT

The German Corporation Law further requires the preparation of a consolidated income statement and offers two different methods for this. When the basic method is used, it is not necessary to cancel intercompany sales and purchases. Only intercompany income derived from services is to be eliminated, and the amount of intercompany sales must be stated separately (Section 332). If this method is selected, however, companies must prepare the consolidated income statements in a very detailed form according to the arrangement which is prescribed for preparing the individual income statement (Section 157). This form differs from American income statements primarily in that it reports

separately the sales figure and the year's cost of raw materials, wages, salaries, depreciation, and similar expenses, while American income statements frequently deduct the cost of goods sold from sales without offering great detail on the structure of the cost of goods sold. Since the cost figures in the German income statements represent expenditures for goods both sold and unsold, changes in finished and in-process inventories as well as cost charged to fixed assets built by the company must be included in a special account (account for changes in assets).

The second method is somewhat more simplified. Only a few groups of expenditures must be shown explicitly while the bulk of costs may be shown as one amount representing the cost of goods sold, which is to be deducted from the sales figure. If this method is selected, all intercompany transactions must be eliminated and dividends received from consolidated subsidiaries must be excluded (Section 333), as proposed by the *Accounting Research Bulletin 51* and generally required by the SEC. Contrary to SEC regulations, the difference between the dividends received from and the earnings of unconsolidated subsidiaries need not be reported.[18]

When a subsidiary's stock is purchased at an interim date, both the pre- and post-acquisition earnings of the subsidiary must be included in the income statements,[19] and, in this case, it seems that the German regulations insist on assigning the entire profit of the subsidiary to the consolidated profit and the minority interests share in profit respectively which is contrary to the views in the USA.

DISCLOSURES IN THE ANNUAL REPORT ACCOMPANYING THE CONSOLIDATED STATEMENT

In the USA, footnotes and additional statements or schedules are often required to disclose some underlying procedures of consolidation or to give further details as to some accounts. For example, under the SEC regulations, the accounting principles adopted in determining the inclusion of subsidiaries must be disclosed,[20] or reasons must be given if intercompany profits are not eliminated.[21]

In Germany, footnotes and additional schedules in support of balance sheets and income statements are usually not furnished. All corporations, however, are bound to prepare an annual report on the

[18] Rappaport, pp. 15.15, 15.16.
[19] This procedure is also preferred in the USA. See Bedford, Perry, Wyatt, *op. cit.*, p. 374.
[20] Rappaport, p. 15.12.
[21] Rappaport, pp. 15.16, 15.17.

financial situation and operating results of their company (Sections 148 and 160). In addition to these individual reports the controlling company of a concern must submit an annual report on the activities of the concern. In the latter report some data on consolidated and nonconsolidated subsidiaries and the principles for inclusion must be disclosed. Also the financial condition of the consolidated enterprise must be clearly revealed and the consolidated financial statements must be explained. In particular, deviations from the preceding consolidated statements must be noted (Section 334).

AUDITING AND PUBLICATION OF THE CONSOLIDATED STATEMENT

In Germany, the consolidated balance sheet, the consolidated income statement, as well as the annual report of enterprise activities must be audited by independent public accountants. If the stockholders of the parent company do not elect special auditors for the consolidated statements, the auditors of the parent are also assumed to audit the consolidated financial statements. The auditors of consolidated statements are obliged to verify the individual statements of those subsidiaries which are consolidated that were not subject to an official audit by an independent public accountant. The auditors are not only entitled to get information from all affiliates, but they even have the power to secure information from the auditors of the parent company and the subsidiaries.[22] This provision is particularly important for the verification of the accounting for intercompany profits and losses and is essential because German CPA firms are normally not large enough to examine all subsidiaries of a concern (Section 336). The consolidated statements, as well as the individual statements of the parent company, must be published simultaneously in the official German newspaper. All corporate subsidiaries must also publish their statements. All statements and annual reports must be submitted to the Registrar of Companies (Sections 336-338). This provision for establishing, certifying, and publishing consolidated financial statements does not depend on the corporation's desire to sell securities or wish to become listed. With only a few exceptions, the same degree of publicity is required of all corporations. These procedures differ from American standards in that financial statements usually need not be published and in that the SEC sometimes accepts

[22] For details, see Forster, K. H., "Neue Pflichten des Abschlussprüfers nach dem Aktiengesetz von 1965," *Die Wirtschaftprüfung*, 1965, No. 22, pp. 17-20.

even financial statements which are not certified by CPAs.[23] Furthermore, consolidated statements are often not accompanied by individual subsidiary statements.[24]

SUMMARY

The essential points of the new German consolidated financial statement regulations are:

1. All corporations which control subsidiaries that are subject to consolidation must prepare consolidated balance sheets, consolidated income statements, and annual reports for the entire economic entity. These statements must be certified and published. Consolidated surplus statements are unknown in Germany. Only corporations that are direct or indirect subsidiaries of other corporations need not prepare consolidated statements.

2. With few exceptions, all majority owned domestic companies, as well as nonmajority owned companies, in some cases, must be included in the consolidated statements.

3. A simple technique is prescribed for the elimination of the investment account of the controlling company: the difference between the parent's investment account, carried at cost, and the equity in the net assets of the subsidiary must be recalculated each year and must appear as a separate item on the balance sheet.

4. All intercompany profits in inventories and sometimes intercompany profits in other assets must be eliminated.

5. Treasury stock must be considered as an asset.

6. Two methods are available for preparing the consolidated income statement. One method requires a more detailed arrangement of cost data but does not require the elimination of intercompany sales; the amount of intercompany sales must be stated separately, however. The second method requires the elimination of all intercompany transactions, but it offers a more condensed form for the arrangement of the items.

7. German consolidated financial statements are of no importance in the area of income taxation. If income pooling for the purposes of taxation is agreed upon, the profit or loss of the affiliates is determined on the basis of the individual statements, including intercompany profits.

[23] Rappaport, pp. 7.5, 7.6, 7.7.
[24] Rappaport, pp. 7.6, 7.7.

Stock Corporation Law Reform in Germany and the Public Accountant

RUDOLPH J. NIEHUS*

After nearly twenty years of discussion in the professional publications and more than four years of hearings and debates, the West German Parliament has recently approved a new stock corporation law.[1] This law was passed on September 6, 1965, and became effective January 1, 1966.[2] The amendments to the existing corporation law were so numerous that an entirely new law was written. While all of the changes may be viewed as significant and of far-reaching consequences, the new law is most importantly a reform law in two major respects: (1) it radically changes the valuation methods which have been applicable in the case of stock corporations, and (2) it introduces the requirements of compulsory audits and the publication of consolidated financial statements.

This article will attempt to summarize and to explain all changes in the new stock corporation law which seem to be of interest both to public accountants and to other observers of the changing international accounting scene.

DISCLOSURE IN FINANCIAL STATEMENTS

The new law retains the requirement that all stock corporations — whether they are listed on the stock exchange or not, or whether they

* R. J. Niehus is a partner of the firm Dr. Wollert-Dr. Elmendorff K.G., Düsseldorf, Germany. He is a member of the first subcommittee of the German Institute on "generally accepted principles of auditing" and of the Tax Committee of the American Chamber of Commerce in Germany. Mr. Niehus has contributed several articles to German and other national accounting publications.

[1] *Bundesgesetzblatt I* (Federal Gazette), p. 1089 ff.

[2] Section 46, "Einführungsgesetz zum Aktiengesetz," *Bundesgesetzblatt I,* page 1185 ff.

have one or five hundred thousand shareholders or not — must report the financial results of their fiscal year in prescribed, uniform financial statements.[3] Such financial statements must be audited by a *Wirtschaftsprüfer* (certified public accountant).[4] To insure uniformity, the new law contains, with explanations, a model balance sheet and a model statement of income.

Generally speaking, the new law has not changed the basic structure of the usual German balance sheet. For the assets, the captions still appear in the reverse order of their liquidity, beginning with fixed assets and ending with cash and miscellaneous accounts receivable. This is the converse of the normal American balance sheets. The same exists on the liability side. There, the first item in a German balance sheet is capital stock, followed by surplus, and long-term and short-term liabilities. The prescribed statement of income was entirely revised only four years ago. It is understandable, therefore, that the changes in the German income statement prescribed by the new law are minimal.[5]

A brief discussion of what the author believes to be the more significant features of the new German model balance sheet and statement of income follows. (Detailed English translations are given in Figures 1 and 2. The new captions are italicized.)

MODEL BALANCE SHEET

The uniform balance sheet (see Figure 1) retains the sequence of captions customarily found on earlier German balance sheets.[6] Fixed assets are followed by inventories, accounts receivable, cash items, and deferred charges. The German Parliament, however, decided to do away with the present distinction between fixed and current assets. Instead, a four-part division of the assets has been introduced: fixed assets, inventories, other asset items, and deferred charges. In determining such a division, the experts were influenced by the knowledge that inventories play such an important part in the financial structure of the normal corporation that the total inventory amount should be prominently displayed on the balance sheet.[7] To restore the former

[3] S. 162.
[4] S. 164, Sub-s. 1.
[5] For a discussion of the income statement see Niehus, R. J., New German Model Income Statement, *The Accounting Review,* April, 1961.
[6] S. 151.
[7] Cf. "Begründung zum Regierungsentwurf und Ausschussbericht," in *Aktiengesetz,* Düsseldorf, 1965, p. 227.

distinction between fixed and current assets, usually found in American balance sheets, one need only add inventories to other asset items.

Parliament did not choose to distinguish between long- and short-term items either on the assets or on the liabilities side. They did realize, however, that such a distinction, which is usually found in the balance sheets of U.S. companies, may also be very revealing. To allow a similar reading, the German government requires that for loans receivable, and for certain payables, the maturity dates must be parenthetically noted.[8]

A novel feature for German balance sheet readers is the subdivision of fixed assets into three main categories:

1. tangible fixed assets (with eight prescribed subtitles),
2. investments, and
3. long-term loans (more than five years — including loans secured by mortgages in an amount of DM ......).[9]

A more revealing insight of the cash position of a company is also thought to be obtained by the now compulsory indication (parenthetically) of trade accounts receivable: "includes DM ...... not due within one year." This new provision doubtless will induce many corporations in Germany to prepare for the first time a more accurate aging of accounts receivable and may compel public accountants to examine the item more closely.

Concerning "notes receivable," management must now indicate in the balance sheet what portion of these assets qualifies for discounting with the German *Bundesbank* (Federal Bank). This disclosure provides a very revealing indication of the liquidity of such notes.[10]

On the liabilities side, the subdivision of accrued accounts, which previously could be shown as one amount, must now be classified into the following three categories: (1) accrued pensions, (2) long-term accruals, and (3) other accruals. This new classification is certainly informative. The belief here was that both pensions and other accruals usually consist of long-term items only, so that short-term accruals automatically would fall under "other accruals."[11]

The classification of liabilities into those not due within four years (banks, bonds, and other) and the other liabilities (which previously had to be classified into the following six categories) is also quite

[8] S. 151.
[9] S. 151.
[10] "Begründung zum Regierungsentwurf," *Aktiengesetz, loc. cit.*
[11] S. 155.

Figure 1. Model German Financial Statements, Balance Sheet

ASSETS **DM**

I. OUTSTANDING SUBSCRIPTIONS TO CAPITAL STOCK
(includes DM ________ called up) . . . . ________

II. FIXED ASSETS:

A. Tangible and intangible fixed assets:

1. Improved land (and real estate rights) with business, factory, and other buildings . . . . ________
2. Improved land with residence buildings . . . . ________
3. Unimproved land . . . . ________
4. Buildings on third-party land not included in Nos. 1 and 2 above . . . . ________
5. Machinery and mechanized equipment . . . . ________
6. Tools, factory and office furniture, and fixtures . . . . ________
7. *Buildings under construction and prepayments to suppliers of capital equipment* . . . . ________
8. Concessions, patents, licenses, trade marks, and similar rights . . . . ________

B. *Investments:*

1. *Investments in share capital of companies* . . . . ________
2. *Securities not included in No. 1 above* . . . . ________
3. *Loans not due within four years* (includes DM ________ secured by mortgages) . . . . ________

Total fixed assets ________

III. CURRENT ASSETS:

A. Inventories:

1. Raw material and supplies . . . . ________
2. Work in process . . . . ________
3. Finished products, goods . . . . ________

B. Other assets:

1. Advance payments (to the extent not included in Nos. I and II above) . . . . ________
2. Trade accounts receivable (*includes DM ________ not due within one year*) . . . . ________
3. Notes receivable (includes DM ________ meeting "Bundesbank" discounting standards) . . . . ________
4. Checks . . . . ________
5. Cash on hand, including cash in "Bundesbank" and post office accounts . . . . ________
6. Cash in other bank accounts . . . . ________

7. Securities if they do not fall under Nos. 3, 4, 8, or 9 or under II B	______
8. Treasury stock shares (par value must be listed)	______
9. *Shares of a holding company (par value must be listed)*	______
10. Receivables from subsidiary or holding company	______
11. Receivables granted under:	
(a) paragraph No. 86	______
(b) paragraph No. 111 (express consent of Board of Directors)	______
12. *Miscellaneous*	______
IV. DEFERRED CHARGES	______
V. LOSS	______

LIABILITIES	DM
I. CAPITAL STOCK	______
II. RESERVES:	
1. Legal reserves	______
2. Voluntary reserves	______
III. VALUE CORRECTIONS OF ASSETS	______
IV. RESERVES FOR CONTINGENT LIABILITIES:	
1. *Pension reserves*	______
2. *Long-term reserves*	______
3. *Miscellaneous reserves*	______
V. *LIABILITIES NOT DUE WITHIN FOUR YEARS:*	
1. *Loans* (includes DM ______ secured by mortgages)	______
2. *Bank loans* (included DM______ secured by mortgages)	______
3. *Miscellaneous long-term liabilities*	______
VI. OTHER LIABILITIES:	
1. Trade accounts payable	______
2. Notes payable	______
3. Bank loans and overdrafts	______
4. Customer advances	______
5. Liabilities to subsidiary and holding companies	______
6. Miscellaneous liabilities	______
VII. DEFERRED CREDITS	______
VIII. PROFIT	______

Italics denote new captions.

Figure 2. Model German Financial Statements, Profit and Loss Statement

	DM
1. Revenues from sales	______
2. Increases or decreases in manufactured inventories or work-in-process and finished goods	______
3. Capitalized value of self-constructed assets	______
4. Total value produced	______
5. Consumption of raw materials and supplies or the equivalent thereof purchased from third parties, and consumption of purchased merchandise	______
6. Gross operating profit	______
7. Income from pooling arrangements	______
8. Income from investments in affiliated companies	______
9. Income from other investments	______
10. Other interest or similar income	______
11. Gains on disposal of fixed assets and other gains in connection with same (e.g., appreciation, restored depreciation)	______
12. Income additions from the dissolution of value correction accounts, in as far as not reportable under (1) above	______
13. Income additions from the dissolution of provisions made through the P&L account (*Rückstellungen*)	______
14. Miscellaneous income (including nonrecurring income)	______
15. Gains from arrangements for sharing operating losses	______
Subtotal	______
16. Wages and salaries	______
17. Compulsory social employment costs	______
18. Social employment costs, as far as not reportable elsewhere	______
19. Depreciation and value corrections of tangible long-term assets (as defined in the model balance sheet)	______
20. Depreciation and value corrections of intangible assets (as defined in the model balance sheet)	______
21. Write-downs and value corrections of current assets (as defined in the model balance sheet)	______
22. Losses on disposals of fixed assets	______
23. Interest and similar expenses	______
24. Taxes:	
(a) On income, gains, and properties	______
(b) Others	______
25. Losses from arrangements for sharing operating losses	______

26. Miscellaneous costs and expenses............................______
27. Income transferred under pooling arrangements..............______
28. Income or loss of the current period........................______
29. Profit or loss carried forward from the previous period.........______
30. Liquidation of earnings reserves (*Rücklagen*):
    (a) The legal reserve..______
    (b) Any voluntary reserve.......................................______
31. Additions to earnings reserves (*Rücklagen*):
    (a) Additions which under the law or the by-laws must be made to legal reserve..______
    (b) Additions which under the by-laws must be made to the free reserve ....______
    (c) Additions which the board of directors and managers, as authorized by the by-laws, must assign to the legal reserves..______
32. Net income or loss......................................______

revealing: trade payables, notes payable, bank loans and overdrafts, customer advances, liabilities to subsidiary and holding companies, and miscellaneous liabilities.

The subdivision of long-term investments and loans, the disclosure of the portion of accounts receivable not collectible within one year and that of notes which meet the discounting standards of the Federal Bank, and, on the other hand, the clear designation of liabilities not due within four years, are considered to be more revealing of a corporation's liquidity than the usual distinction between current and long-term liabilities. What are current and long-term respectively may vary from business to business and may be significant only to the insider. The experience of a firm over years, however, gives a clear term which is also meaningful to the individual stockholder who does not have any special knowledge of the particular type of business of "his" corporation.

In accordance with the customary German accounting practice, the new law permits valuation reserves on various assets to be shown separately on the liability side, instead of deducting them contra from the respective assets. Such reserves may be subdivided into those related to fixed and to current assets.[12] While those on fixed assets must be classified into the respective number of captions applicable for the fixed assets classification of the reporting corporation, those for current assets — as was also the case before — may be shown in one amount.

[12] S. 152.

But the reserve for accounts receivable must always be shown separately (usually parenthetically).[13]

It has always been a standard German accounting practice to disclose contingent liabilities by a footnote to the balance sheet.[14] In the future, such footnotes must be prepared for the following four categories:

1. Notes receivable discounted with banks for realization
2. Suretyship actions
3. Guaranties secured by guaranty contracts
4. Collateral for third-party liabilities.[15]

STATEMENT OF INCOME

As noted previously, no significant changes have been made in the statement of income. Under the prior law both the account and report form could be used; in the future, only the latter will be permissible.[16]

When a new prescribed statement of income was introduced four years ago, nearly all German corporations were required for the first time to disclose net sales. A number of corporations continued to attempt to distort this significant amount by adding to it auxiliary sales of various types or by deducting rebates, discounts, and the like. The new law attempts to prevent this type of practice in the future by requiring that only bona fide sales, which form the basis of a corporation's business, before any deductions, may now be reported.[17] Additionally, the prior year's amounts for all income and expense items must be shown parenthetically if they were reported under different captions in the prior year's report. Improved comparability between years should result from the requirement of the parenthetical disclosure in Item 14, "Other Income," of the amount of nonrecurring income included in the reported total.[18]

ANNUAL REPORT TO STOCKHOLDERS

As before, German management must prepare an annual report to stockholders,[19] and, as in the past, this report is to consist of two main parts: (1) a report on the business situation of the company,

---

[13] S. 151, Sub-s. 5.
[14] S. 131, Sub-s. 7 of the former stock corporation law (*Aktiengesetz 1937*).
[15] S. 151, Sub-s. 5.
[16] S. 157, Sub-s. 1.
[17] S. 158, Sub-s. 1.
[18] S. 157, Sub-s. 1, No. 14.
[19] S. 128 of the former stock corporation law.

and (2) comments on items appearing in the balance sheet and statement of income. As was required also under the former law,[20] the *Wirtschaftsprüfer* must examine the second part in detail and the first part for general correctness, and he must mention this examination in his opinion.[21]

The provisions relating to the annual report to stockholders have been revised to provide more information regarding the valuation of items appearing on the balance sheet. Under the new law,

1. The valuation and depreciation methods must be explained in as detailed form "as is necessary to get the most informative insight knowledge of the financial and profitability situation of the corporation."[22]
2. Material changes from prior year's valuations must be explained in the annual report. This is an innovation, as the principle of consistency, although contained in the old law in some loosely worded provision, was never really observed by any German corporation. In the future, if an accounting change affects the profits by an amount of more than 10 percent and if such amount exceeds one-half of one percent of the capital stock, this change must be explained in detail in the annual report.[23] It would seem that in this respect the situation now more closely resembles that existing under U.S. reporting requirements which also call for a disclosure of any material deviation from consistent practices. It is interesting to note, however, that in Germany the legislator has clearly defined what is a material deviation and thus saved the *Wirtschaftsprüfer* many discussions with his clients.

NEW VALUATION RULES

In the past, German asset valuation, in both principle and practice, centered about the "principle of the protection of creditors." This meant that the main objective of management was to ensure that the distributable net worth was sufficient to satisfy the claims of the corporate creditors in case of financial disaster. This security, it was felt, could best be attained by stating assets as low and liabilities as high as possible. This principle is also embodied in the new German

[20] S. 166, Sub-s. 1.
[21] S. 167, Sub-s. 1.
[22] S. 160, Sub-s. 2.
[23] S. 160, Sub-s. 2.

commercial code;[24] the legal authority for it was contained in the former stock corporation law which ruled that "assets were to be stated at a value not higher than cost."[25] Concerning the valuation of liabilities, the old law did not specifically forbid that accruals could be shown as liabilities — although this practice was frowned upon by the accounting profession — so that in effect the latter could be overstated.

The new law truly, in this area of accounting practice, is a reform law. While under the old law a "maximum value" for assets and a "minimum value" for liabilities had been decreed, the new law quite clearly defines that "fixed assets must be valued at cost." Also, the practice, apparently still prevalent in some circles, of calculating a rather excessive depreciation without a systematic basis, merely intended to reduce the distributable profit, has been outlawed. Further, depreciation may be charged on those fixed assets that are subject to wear and tear if such depreciation "has been calculated according to a plan based on generally accepted principles of accounting."[26] Extraordinary depreciation, i.e., depreciation not provided for by the normal plan, may be charged only if the value of specific fixed assets has declined permanently below the book balances that would have been arrived at through normal depreciation. The importance of the new depreciation provisions has been made very clear, not only through the unequivocal wording noted above, but also because a separate section of the law was devoted to them.[27] Management, however, is not "penalized" if it takes extraordinary depreciation because it is not required to restore such depreciation in subsequent years if and when the cause for which it was charged should no longer exist. Instead, the lower book values may be retained.[28]

The reform law retains the former provision that for intangible assets, such as patents, trade marks, registered designs, etc., a value may be shown on the balance sheet only if such intangibles have been acquired from a third party at a cost.[29] Similarly, the cost of a purchased goodwill, as before, must be amortized over a period not exceeding five years.[30] Finally, the new law reiterates that costs arising

[24] S. 40, *Handelsgesetzbuch* (Commercial Code).
[25] S. 131 of the former stock corporation law (*Aktiengesetz 1937*).
[26] S. 153, Sub-s. 1.
[27] S. 154, Sub-s. 1.
[28] S. 154, Sub-s. 2.
[29] S. 153, Sub-s. 3.
[30] S. 153, Sub-s. 4.

from the organization of a company cannot be capitalized but must be expensed immediately. The costs for preparing the company for operation, however, may be deferred and amortized over several years.[31]

Concerning inventory valuation, a rather sweeping shift from the accounting methods conventionally adopted in Germany has occurred. Where in the past cost was the maximum amount at which inventories could be stated on the balance sheet (i.e., it might have been necessary to state them at lower market, but, in any case, it was permissible to go below that value), the new law now specifies that inventories must be stated at the lower of cost or market.[32] This so-called minimum value ruling, however, is not required with the same degree of rigidity as for fixed assets. Under the new law it will be permissible to value inventories at less than market price; however, this is permitted only if in the objective opinion of management it is necessary to assure that in the foreseeable future the value of such inventories will not need to be adjusted downwards again as a result of fluctuations in price. Similarly, if for income tax purposes, a value lower than cost or market has been considered permissible, which would be the case for most raw materials purchased on world markets (so-called strategic raw materials which may be valued at 20 percent below cost in order to incite stock piling),[33] this value lower than cost or market may also be adopted for the balance sheet. And — what is of at least equal importance — this value may be retained even after the market should have gone up again.

The new rule which permits the valuation of inventories at "Lifo"[34] and also at "Fifo" is quite revolutionary. It remains to be seen if by "Lifo" or "Fifo" the law means the same as what is understood in the U.S. In the U.S. "Lifo" is a valuation method based on the assumption that the last required goods are the first to be sold. In Germany "Lifo" has been unofficially permitted by the tax authorities only if the physical movement of inventories did indeed conform to the assumed flow of stock. Since the new law also states that "Lifo" or "Fifo" values must be determined on the basis of generally accepted accounting principles, it would be surprising if the more liberal attitude, which seems to prevail in the U.S. in this respect, were also adopted in Germany.

If one appreciates that every inventory valuation method — as indeed, every valuation method — is a means of determining income,

[31] S. 153, Sub-s. 5.
[32] S. 155, Sub-s. 1.
[33] S. 155, Sub-ss. 2 and 3.
[34] S. 155, Sub-s. 3.

it is quite clear that the managements of German corporations still have a certain degree of flexibility in this respect. Also under the new law, management may place a value on inventories which is lower than cost or market if it "anticipates" market prices to go down.[35] In other words, the mere fear of a decline in sales prices would justify a write-down. If one compares this situation with that in the U.S. (as reflected in the pronouncements of the American Institute of Certified Public Accountants),[36] such a possibility does not seem to exist there. Under U.S. principles, while they also recognize cost or market, or whichever is lower as the rule for the valuation of inventories, a write-down on inventories would not be possible unless a loss is evident. "In applying the rule, however, judgment must always be exercised and no loss should be recognized unless the evidence clearly indicates that a loss has been sustained,"[37] and "no loss should be recognized even though replacement or reproduction costs are lower."[38] In other words, in the U.S. there must be evidence before a write-down can be made, while in Germany the mere expectation is ample justification.

These provisions are designed to reduce, if not to prevent completely, the utilization of "hidden reserves" — favorite means of hiding the profit from German shareholders in the past. Nevertheless, the new law recognizes that corporations cannot distribute all profits generated in a given fiscal year, but that a certain amount often must be retained as working capital or for investment purposes. The question whether the stockholders at the annual meeting should be the ones to approve the financial statements and thus decide on the amount of the profit to be distributed or whether such a decision should be left with management was one of the most hotly debated issues of the new law.[39]

The Government-sponsored reform bill originally provided for the stockholders' meeting to fix the amount of the profit available for distribution. Gradually, over the many years of public debate, the argument of the more conservative forces, that only management really knows how much of the enterprise's funds could be distributed as dividends without impairing the profit situation of a corporation, gained momentum. On the other hand stockholders, in their understandable desire to get as high a dividend as possible, were considered prone to disregard the financial needs of "their" corporation. Conse-

[35] "Begründung zum Regierungsentwurf," *Aktiengesetz, loc. cit.*, p. 247.
[36] *Accounting Research and Terminology Bulletin,* Final Ed., New York, 1961, pp. 27 ff.
[37] *Loc. cit.*, p. 31.
[38] *Loc. cit.*, p. 31.
[39] S. 172.

quently, the former provision, that the managers and Board of Directors (*Aufsichtsrat*) acting jointly might determine the annual financial statements and thus set the amount available for distribution as dividends, was restored to the new bill.

It was also felt necessary to restrict management from reducing the distributable profits too much. Therefore, the new law specifies that not more than 50 percent of the annual profit (after taxes on income) may be transferred to "earned surplus" or — as this account is called in Germany — to "free reserves." Such an allocation of more than 50 percent of any annual profit to free reserves, however, may be made only if the balance in the free reserve account after the new allocation of the profit does not exceed 50 percent of the capital stock of the company.[40] The balance of the profit must remain available for distribution. Naturally, stockholders may decide to distribute a smaller amount.[41]

There will still be situations where the management and the Board of Directors may not agree on the annual financial statements or may not want to do so. In this case, they must refer the matter to the annual stockholders' meeting where the stockholders may decide to distribute all of the annual profit and would not be bound by the 50 percent limit. Even in such a situation, however, it was felt that the corporation's financial position should be protected against stockholders' "greed." Thus, before submitting the annual statements to the stockholders' meeting, management may transfer up to 50 percent of the annual profit to earned surplus — provided the by-laws of the corporation permit them to do so. The stockholders then cannot reverse the decision of management; effectively they can decide only whether all of the 50 percent or less should be distributed.[42]

CONTROL OF PROPER VALUATION METHODS

The new German law may seem very laudable if perhaps a little too perfectionistic. Still, the German government felt that the stockholders were not yet adequately protected against misleading statements that an overanxious management may have prepared and a conniving *Wirtschaftsprüfer* may have audited. The new law needed some "teeth" and thus it provided that the financial statements shall be considered null and void if:

1. items appearing on the balance sheet have been overvalued (assets

[40] S. 58, Sub-s. 2.
[41] S. 58, Sub-s. 2.
[42] S. 58, Sub-s. 3.

shown at a higher, and liabilities at a lower value than is permissible);
2. items have been undervalued (assets shown at a lower, liabilities at a higher value than is permissible);
3. additions to, retirements from, and depreciation on the fixed-assets categories to be enclosed on the balance sheet have not been shown separately;
4. receivables from and liabilities to other than identical parties have been netted one against the other;
5. reserves and accrued accounts have been shown as liabilities; and
6. the most important items of the statement of income: net sales, changes in inventories, capitalized value of self-constructed assets, consumption of raw material, etc., have not been shown separately.[43]

The fact that the financial statements are null and void may be a very complicated matter to prove. To do this an individual stockholder (or a group of stockholders) would need to file suit against the corporation. In actual practice, probably the most likely cases to affect stockholders are those where the management has tried to withhold part of the profit from stockholders by understating assets or overstating liabilities. Also in this case, the German government believed that the stockholder must have a legal remedy which they can enforce in practice and within a reasonable period of time. On the other hand, Parliament felt that it would be a difficult matter for the courts to evaluate. Instead, it was decided that accounting questions such as these should be decided by accountants themselves. Consequently, the new law in its final version contains a clause that a stockholder (or a group of stockholders) representing at least 5 percent of the voting stock or stocks in a nominal amount of at least DM 2 million has the right to file a petition with the local court that a *Sonderprüfer* (special auditor) be appointed. This auditor must also be a *Wirtschaftsprüfer* (certified public accountant). If the judge believes the apprehension of the stockholders is justified, he must grant the petition. An appeal may be filed against a refusal. Management and the corporation's regular auditor have the right to present their case to the special auditor. Should this special auditor conclude that profits have been hidden from stockholders, an adjustment must be made to the balance sheet of the year in which the special auditor gives his verdict, and the profit resulting from such an adjustment must be distributed.[44]

---

[43] S. 256, Sub-s. 4.
[44] S. 258.

POSITION OF THE GERMAN *WIRTSCHAFTSPRÜFER* UNDER THE REFORM LAW: AUDITS BY *WIRTSCHAFTSPRÜFERS* ONLY

As was true under the former law, the audits of stock corporations can be made only by *Wirtschaftsprüfers* and *Wirtschaftsprüfungsgesellschaften* (certified public auditors and audit companies).[45] The *Wirtschaftsprüfer* is appointed at the stockholders' meeting.[46] The publication of the agenda of such meeting must — as in the past — mention as one item of business the election of a *Wirtschaftsprüfer*. In the future, however, the agenda must also state the name of the *Wirtschaftsprüfer* the *Vorstand* (management) intends to propose to stockholders for election. In the past this was not necessary, and it is felt that this new provison will give the *Wirtschaftsprüfer* a greater publicity which perhaps will be regretted by some of his colleagues.[47]

Stockholders owning at least 10 percent of the capital stock or shares with a nominal amount of DM 2 million may object to the appointment of a certain *Wirtschaftsprüfer*. In such a case, they must appeal to the local court which will then make a decision.[48]

INDEPENDENCE

As under the former law, the *Wirtschaftsprüfer* is obligated to use his best professional skill and competence in performing his duties.[49] He is obligated to respect professional confidences. Under the new law this obligation extends also to the Chairman of the Board of a *Wirtschaftsprüfungs*-corporation (which are permitted in Germany). Under the earlier law, the Chairman, who does not need to be a *Wirtschaftsprüfer* and, therefore, is not subject to the professional rules of conduct, had the right to enquire into any matters of any client of the *Wirtschaftsprüfungs*-corporation. Although it is understood that such a prerogative was rarely exercised, if at all, its elimination naturally dispels any doubt that may have been cast on the audit corporation in Germany because of the former provision.

DISMISSAL OF A *WIRTSCHAFTSPRÜFER*

As in the past, the stockholders at their meeting may dismiss a *Wirtschaftsprüfer* after he has been elected and before he has completed

[45] S. 164, Sub-s. 1.
[46] S. 163, Sub-s. 1.
[47] S. 124, Sub-s. 3.
[48] S. 163, Sub-s. 2.
[49] S. 168, Sub-s. 3 and S. 141 of the former stock corporation law (*Aktiengesetz 1937*).

his work, i.e., submitted his audit report. At least one case became known in the past where a stockholder who controlled a corporation wanted to distribute a certain dividend while the *Wirtschaftsprüfer* deemed it necessary to reduce the value of a certain investment with the consequence that there no longer was any profit available for distribution. Enraged, the majority stockholder convened a new stockholders' meeting which had just one item on the agenda, namely, the dismissal of the old and the appointment of a new *Wirtschaftsprüfer*. This move was in perfect agreement with the law. The German Institute, however, is said to have intervened and threatened the new *Wirtschaftsprüfer* with a Professional Court of Inquiry if he accepted the appointment. The new *Wirtschaftsprüfer* withdrew after two or three days. In order to prevent a reoccurrence of such a case, a new provision was inserted in the law which gives the dismissed *Wirtschaftsprüfer* an opportunity to report to the stockholders' meeting on the results of his examination completed to date.[50]

ATTENDANCE AT BOARD MEETINGS

The new law also legalizes a procedure which many German corporations apparently observed in the past. The Board of Directors, by a simple majority of votes, may decide to have the *Wirtschaftsprüfer* attend the board meeting which deals with the approval of the year-end financial statements. This enables the board to pose certain questions to the *Wirtschaftsprüfer* for him to answer orally in addition to the information already in his report.[51]

Attendance at the annual stockholders' meeting is obligatory, because the *Wirtschaftsprüfer* should be in a position to assist the stockholders' meeting if, for example, it was decided not to distribute all of the profit available for dividends. Then the *Wirtschaftsprüfer* would be in a position to inform the meeting about the consequences of such a decision which might result in higher taxes. It should be noted, however, that the *Wirtschaftsprüfer* cannot answer any questions the stockholders may have unless he is authorized by the *Aufsichtsrat* to do so.[52]

REPORT

As in the past, the *Wirtschaftsprüfer*, in addition to the opinion

[50] S. 163, Sub-s. 5.
[51] S. 171, Sub-s. 1.
[52] S. 176, Sub-s. 2.

which he must issue on the financial statements, must prepare a long-form report.[53]

The opinion has been given a new wording. It now simply reads: "As a result of our legally required audit, the accounting, the annual financial statements, and the annual stockholders' report conform with the law and the company's by-laws."[54]

Concerning the long-form report, the earlier law was unclear whether such a report need be in writing. The new law dispels such doubts by clearly stating that the items appearing on the financial statements must be analyzed and adequately explained.[55] This means that the German *Wirtschaftsprüfer* will be burdened with the heavy and costly task of writing a detailed report in which he will have to analyze, *inter alia,* all major balances — and the client will have to pay for it. A further result will be, since there is an interrelation between work papers and the long-form report, that the *Wirtschaftsprüfer,* in order to save time and expenses, will prepare his report at the expense of his work papers. Consequently, the new law will hardly have the effect of encouraging the *Wirtschaftsprüfer* to give more attention to his work papers.

[53] S. 166, Sub-s. 1.
[54] S. 167, Sub-s. 1.
[55] S. 166, Sub-s. 1, last sentence.

*National Accounting — Its Scope and Purpose**

JENS LÜBBERT†

The claim can be made that national accounting today has become a standard practice of almost all nations and is generally accepted as a useful instrument of macro-economic analysis. This article attempts to give a short survey on the purposes, the foundations, the scope, and the history[1] of national accounting and the related basic accounting problems that are dealt with in research at this time.

THE PURPOSE OF NATIONAL ACCOUNTING

Whatever the difference between business accounting and national accounting might be in many other respects, there is no denying that both types of accounting are destined to serve the same basic purpose. Providing a profit and loss statement for a single firm is no doubt *one* of the purposes of business accounting. This single purpose could be achieved without setting up an elaborate system of accounts and with-

---

* This is a written version of a lecture given at a seminar of the Department of Accounting, College of Commerce and Business Administration, at the University of Illinois in the fall of 1965.

† Jens Lübbert, Professor of Economics, University of Hamburg, Germany, has held teaching positions at the University of Kiel and the University of Illinois. Professor Lübbert is the Acting Director of the Sozialökonomisches Seminar at the University of Hamburg.

[1] The limitations of space make any but the most passing comments on the history of national accounting in general, and national income accounting in particular, impossible. Those readers interested in this and in many other aspects would be well-advised to consult Paul Studenski, *The Income of Nations. Part One: History* (with corrections and emendations), New York, 1961; *Part Two: Theory and Methodology* (with corrections and emendations), New York, 1961.

out establishing a highly complex body of rules that makes accounting so frightening to many laymen who try to comprehend the principles underlying it and the statements derived from it. In addition to this basic purpose, business accounting also provides information about the general performance of private and public firms and gives information of the sources and the reasons for changes in profits and losses. The impressive development that business accounting and the techniques employed in business accounting have undergone during the last decades gives ample evidence of the increasing importance of the latter purpose it is to serve.

Very much the same is true for national accounting. Among other things, its purpose is to provide information of national income or domestic income and their changes. It should be stressed that profits and losses, of central importance in private business, are of little or no importance on a national level and, therefore, in the context of national accounting, the concepts of national or regional income are of much greater importance in this general context. The purpose of national accounting goes far beyond providing a national income statement. Similar to business accounting, its purpose is to furnish information of the sources of past or pending changes in total national income and its components to those individuals who must make decisions on a macroeconomic level.[2] The construction of national accounts must permit a maximum of information of this kind. Unless advice for present and future action can be derived from and based on the data that national accounting provides, it becomes no more than a mere record of past occurrences with value to no one but those historians who consider the main goal of history to be a mere compilation of facts that have no expressed meaning to the present.

THE FOUNDATIONS OF NATIONAL ACCOUNTING

Because of the very purposes that both business accounting and national accounting are to serve, the statement can be made that both are far more than mere techniques for the systematic recording of past things and occurrences. In order to make these records render the information needed for present action and in order to use them to pinpoint the sources of problems and unwelcome developments, some basic ideas of existing economic interrelationships should be given. This

[2] *The National Economic Accounts of the United States,* Hearings before the Subcommittee on Economic Statistics of the Joint Economic Committee, 85th Congress of the United States, Washington, D.C., 1957, p. 133.

is true both on a micro-economic level, i.e., for the individual firm, and on a macro-economic level, i.e., for the economy as a whole. Unless the existing records are supplemented by some idea as to the relationships existing between different past occurrences and/or the relationships that exist between past and present or future occurrences, they are of little or no importance to present-day decision-making.[3]

This implies that unless the data accumulated by accounting can be supplemented by meaningful hypotheses (see below), the question may well be raised whether the results are worth the considerable effort. The hypotheses must refer to two things:

1. They must give some idea how past occurrences will influence the present and future state of business — whether on a micro-economic level or on a macro-economic level — if no positive action is taken. One might be justified in calling this a hypothesis on the temporal interdependence existing between economic events that are of interest to the decision-maker.
2. They must give some idea of the type of action that may be taken to bring about the results desired and what the direct and indirect effects of such actions will be. For simplicity this idea might be called a hypothesis referring to strategic interdependence.[4]

Both types of hypotheses are part of a general theory of the firm and a general theory of the national economy respectively. This general theory must contain meaningful hypotheses concerning both temporal interdependence and strategic interdependence.

There can be no doubt that the general theory of the firm antedates macro-economic theory. This means that the foundations for the extension of business accounting from a mere recording instrument to a tool of the decision-making process of management were developed at an early time.

The tradition of macro-economic theory as the total of meaningful hypotheses about the interrelationships and the one-sided relationship that exist or are assumed to exist between the economic aggregates was revived only three decades ago. While the tradition as such dates back

[3] Richard Stone and Giovanna Croft-Murray, *Social Accounting and Economic Models,* London, 1959, p. 12; Richard Stone "Model Building and the Social Accounts: A Survey," in *Income and Wealth Series IV,* M. Gilbert and R. Stone (eds.), London, 1955, p. 27.

[4] This problem is extensively dealt with in Ragnar Frisch, "From National Accounts to Macro-Economic Decision Models," in *Income and Wealth Series IV, loc. cit.,* p. 1.

to the classical authors and many authors preceding them,[5] it was dormant for a considerable period. Only with what is frequently referred to as the "Keynesian revolution" in the field of economics did macro-economic theory regain a central place in economic theory. This development was a prerequisite for the rapid expansion of national accounting as an important instrument of economic analysis.

This does not mean that national-income statements had not appeared before.[6] In fact both private and public research in a great many countries previously had prepared such statements. It does indicate, however, that because no meaningful hypotheses of the temporal and the strategic interdependence existing in the economy were given and generally accepted both by professional economists and those responsible for economic policy, the construction of elaborate systems of national accounts, in most cases, was not considered worth the required effort.

THE SCOPE OF NATIONAL ACCOUNTING

Basically, there are two different approaches to accounting in general and to national accounting in particular:

1. The totality of all economic information of possible interest to the historian and the decision-maker may be contained in one basic accounting framework. To make this type of accounting understandable, additional information of possible interest for the solution of particular problems might well be given in supplementary tables. This all-embracing or totally integrated type of general framework is occasionally, but not as a rule, realized in business accounting. As of today, it is not realized in national accounting.
2. Separate and largely independent accounting frameworks are devised for the analysis of different questions and the provision of guidance for the solution of different problems. No definite relation-

[5] A survey of some historical circular flow models that are entirely hypothetical due to the complete lack of statistical information at the time of their construction is given by Erich Schneider, *Einführung in die Wirtschaftstheorie IV. Teil Ausgewählte Kapitel der Geschichte der Wirtschaftstheorie 1. Band,* Tübingen, Germany, 1962, p. 17.

[6] See the many references given to national income estimates and statements in Joseph A. Schumpeter, *History of Economic Analysis,* edited from the manuscript by Elizabeth Boody Schumpeter, New York, 1954, and the complete survey of such estimates given in Paul Studenski, *The Income of Nations. Part One: History, loc. cit.*

ships exist between the structure and the conceptual framework of these several and separate systems.[7]

Presently, this second approach provides a fair description of the situation prevalent in the field of national accounting. A number of separate frameworks for the analysis of different problems of interest to different decision-making bodies do exist. These can be integrated, if at all, only after major conceptual and technical problems are overcome.[8] To some extent this is true, no doubt, because different problems had different importance for policy purposes, scholarly interest was for unknown reasons concentrated more on one problem than another, etc.

While this article is mainly concerned with the systems of national income and product accounts, it would be misleading if no attention were given to the other parts of national accounting.[9] This is even more true because ignorance of the existence and the role of these parts of national accounting might possibly cause the reader not to realize the significant effort taking place today, the goal being to enable an integration of the several approaches.

a. The system of national income and product accounts provides information on the level and the structure of current economic activity that takes place in an economy, the level and possibly the distribution of income that results from this activity and from other sources, and the disposal of these income totals.[10]

---

[7] Morris A. Copeland, "The Feasibility of a Standard Comprehensive System of Social Accounts," in *Problems in the International Comparison of Economic Accounts. Studies in Income and Wealth.* Volume Twenty, Conference on Research in Income and Wealth (ed.), Princeton, 1957, p. 19.

[8] A survey of some of the difficulties that arise if efforts are undertaken to bring about an integrated system of national accounts is given by Stanley J. Sigel, "A Comparison of the Structure of Three Accounting Systems," in *Input-Output Analysis: An Appraisal. Studies in Income and Wealth.* Volume Eighteen, Conference on Research in Income and Wealth (ed.), Princeton, 1955, p. 253. See also *The National Economic Accounts of the United States,* Hearings, *loc. cit.*

[9] For a more extensive survey of the different segments of national accounting the reader may consult *The National Economic Accounts of the United States,* Hearings, *loc. cit.*

[10] The Office of Business Economics in the United States Department of Commerce issues supplements to the Survey of Current Business at irregular intervals that contain extensive treatments of the conceptual development in the field of national income accounting, thorough discussions of the results achieved, and critical outlooks at the sources used for the statements made. See United States Department of Commerce, Office of Business Economics, *National Income,* 1951 Edition, Washington, D.C., 1951; *National Income,* 1954 Edition, Washington, D.C., 1954; *U.S. Income and Output,* Washington, D.C., 1958. Similar statements and discussions are published in many countries at regular or irregular intervals.

b. The system of flow-of-funds accounts or similar accounts, in nations other than the USA, provides information on the money-flows and credit-flows that take place in an economy or on all financial transactions taking place between different economic units in an economy.[11]
c. The system of input-output accounts or the input-output tables is designed to give information about the flows of current inputs that take place between separate sectors of production and that are conditioned by the production activity in these sectors.[12]
d. The system of balance-of-payments accounts provides information on all transactions that take place between domestic residents and foreign persons and institutions whether these transactions are a result of domestic productive activity or not.[13]
e. The system of national balance sheet accounts provides information concerning the level and distribution of total assets (both tangible and intangible) and total liabilities in an economy and their changes.[14]

[11] The first official statement on the system of flow-of-funds accounts was published in 1955: Board of Governors of the Federal Reserve System, *Flow of Funds in the United States,* Washington, D.C., 1955. This publication, which was based on the pathbreaking work done by Professor Copeland and which has since become a more or less official part of total national accounting, contains an extremely thorough and competent discussion of all problems involved.

[12] This approach to national accounting is based on the research done by and the publications of Professor Leontief of Harvard University. See Wassily W. Leontief, *The Structure of the American Economy, 1919-1939,* second ed., New York, 1951.

A discussion of the accounting problems, as well as many other problems, of input-output systems is to be found in Richard Stone, *Input-Output and National Accounts,* published by the Organisation for European Economic Co-Operation, Paris, 1961. In the United States, the United States Bureau of Labor Statistics has made very many valuable contributions to the development of the input-output system. See "The Interindustry Structure of the United States," *The Survey of Current Business,* November, 1964.

[13] An extensive survey of the problems encountered in setting up the balance-of-payments accounts is given in "Report of the Review Committee for Balance of Payments Statistics to the Bureau of the Budget," *The Balance of Payments Statistics of the United States. A Review and Appraisal,* Washington, D.C., 1965. The techniques of accounting used in this context are given by International Monetary Fund, *Balance of Payments Manual,* third ed., Washington, D.C., 1961.

[14] The possibility and the problems connected with a system of national balance-sheet accounts are a matter of scholarly discussion at this time. No final proposals have been made so far and to the best of my knowledge official statistical offices do as of now not formally participate in the development that takes place in this particular area. Raymond W. Goldsmith and Robert E. Lipsey, *Studies in the National Balance Sheet of the United States,* Vols. I and II, Princeton, 1963. See National Bureau of Economic Research, *Measuring the Nation's Wealth,* New York: National Bureau of Economic Research, 1964.

It is easy to see that these several systems of accounts are designed to provide highly different information of primary importance to different decision-making economic groups and can claim different urgencies for the formulation of national economic policy depending upon the general state of business and the political ideas prevalent at the time. It is essentially a matter of the political aims pursued and the hypotheses with respect to the interrelationships existing in an economy which determine how much information is required and how detailed this information must be.

THE STRUCTURE OF THE NATIONAL INCOME AND PRODUCT ACCOUNTS

At least two basic decisions must be made before a system of income and product accounts can be established:

1. Which transactions are to be recorded? This question does give rise to a great many problems that can only be resolved if and when the purpose that national income accounting is to serve is determined.
2. How important should aggregation be, or what degree of disaggregation is required, so that national accounting can be of help in the solution of those problems that face the decision-making groups? There can be no doubt that it is impossible to account for each individual transaction that occurs. Some aggregation of individual transactions of equal type (functional aggregation) and of individual transactors of equal type (institutional aggregation) is inevitable.

The answers to both these questions depend upon the type of decision to be made and the aims pursued as much as on the degree of insight into the functioning of and the interrelationship existing in the national economy. For these reasons, the simple and straightforward original systems of national income accounts have been extended and have been supplemented by other systems of national accounts as economists have gained additional insight into the functioning of the economic system — measured by standards they themselves have set and not necessarily by successes achieved — and as the problems facing the national decision-making bodies have multiplied.

To anyone familiar with double-entry business accounting, these questions must appear absurd, particularly so when he considers the claim that national accounting is a method of double-entry bookkeeping. Under this system the recording of one type of transaction necessarily implies the recording of whatever type of transaction or

change in stocks serves as a balancing transaction. This is *not* true for national income accounting which is why the use of the term "double-entry accounting" might properly be considered misleading. The lengthy discussion of this question was largely or exclusively semantic due to different meanings that different authors attached to the same expressions. It is not because each transaction between different transactors in national income accounting gives rise to two entries for each transactor, one of which might reflect the change in stocks. What is true, however, is that each transaction between different transactors or between different accounts of the same transactor gives rise to two entries — one for each person or account participating in this transaction.[15] Thus it is quite possible to neglect certain types of transactions altogether, whether or not they must be considered in double-entry accounting as balancing entries.

The purpose that national income accounting is to serve requires consideration of two basic types of transactions:

a. Economic transactions that immediately reflect the information desired, i.e., give an indication of the level of economic activity and the level and distribution of total income or which are by definition part of the total income.
b. Economic transactions that determine the level of economic activity and the level and possibly the distribution of income in a causal way.

Without going into the thorny question as to how national income is measured, it may be said that originally, i.e.. under the degree of insight of the working of the economic system existing at the time that national income accounting was formally introduced, the same transactions were to be considered under (b) that were required for (a). The reasoning — quite simplified — went as follows:

Total national income is both identical with and dependent on the total demand for domestically produced commodities and services for the purpose of final use (private and public consumption, private and public investment, and exports). Total final demand consists of several components, and the level of each component was either determined by total income or by factors outside the system which could not adequately be considered and in addition could not be explained directly or indirectly by any type of national accounting. Stocks and changes in stocks (unless a result of present economic activity) need be considered neither as an indicator nor as a causal factor. Originating

[15] G. Stuvel, *Systems of Social Accounts,* Oxford, 1965, p. 12.

from a national income and product account, the system is for these reasons constructed around the concepts of "total aggregate demand for domestically produced commodities and services and its components," "total demand for imports of commodities and services," "total national income arising from participation in the process of production," and "total disposable private income." These transactions are entered into a few accounts, each of which is a result of high aggregation. Each entry constitutes a large number of individual transactions of equal kind (such as total private consumption, total investment, etc.) by a large number of individual transactors. Only when the distribution of total income became important did either become a matter of immediate concern to policy-makers or was either considered to be important as a determinant of the level of total aggregate demand for final use. Disaggregation was inevitable and a distinction was necessary between different groups of transactors.

These simple models constituted the starting point for the first proposals in the field of national accounting and the basis for the general and standard systems of national accounts strongly recommended by such international institutions as the United Nations[16] and, as it was then named, the OEEC.[17] Some countries, the United States among them, have basically maintained these original accounting systems and have drawn what additional information was needed from additional and nonintegrated systems of national accounts.

In other countries, including most countries of Western Europe, the extended insights into the determinants of national income, total aggregate demand for final use, and the level of productive activity have been reflected by extending the original simple system of national income accounts to a more elaborate and complex system.[18] It is correct

[16] *A System of National Accounts and Supporting Tables,* Report prepared by Committee of National Income Experts Appointed by the Secretary General, Statistical Office of the United Nations, New York, 1952.

[17] *A Simplified System of National Accounts.* Cambridge, 1950. *A Standardised System of National Accounts.* Paris, 1952.

[18] The Netherlands and the Federal Republic of Germany are among the many countries that use a more elaborate integrated system of national accounts that try to give information both on the income and product flows and some of the financial transactions that take place. See G. Stuvel, "Recent Experiences in the Use of Social Accounting in the Netherlands," in *Income and Wealth. Series I,* E. Lundberg (ed.), Cambridge, 1951. H. Bartels, "Das Kontensystem für die Volkswirtschaftlichen Gesamtrechnungen der Bundesrepublik Deutschland. Erster Teil: Das angestrebte Kontensystem," in *Wirtschaft und Statistik N.F.,* 1960, p. 317. H. Bartels, K.-H. Raabe, and O. Schoerry, "Das Kontensystem für die Volkswitrschaftlichen Gesamtrechnungen der Bundesrepublik Deutschland. Zweiter Teil: Das ausgefüllte vereinfachte Kontensystem," in *Wirtschaft und Statistik* 12.Jg. N.F. p. 571.

to assert that greater importance is attached to the question of changes in assets and liabilities of different groups in society. Not only is the possession of information on these changes of utmost importance for the formulation of monetary policy but it might, in addition, be a most important determinant of the total demand of different groups in society. This extension of national income accounting does pose a number of problems that will be mentioned later.

The increasing importance of the problems associated with a state of full employment and overemployment in some (particularly European) countries has drawn more attention to the question of the limitation of total supply and of the limitations of supply in certain areas. This requires a more thorough investigation into the conditions existing in the area of production and supply than can be provided by traditional national accounting. A first step in this direction was taken by the extension of the national accounting system in some countries (the Federal Republic of Germany, for example), in such a way that not only total demand and total net supply for the purpose of final use are considered but the total gross supply of commodities and services of different sectors of production as well. This type of problem will ultimately result in the extension of national income accounting either by the introduction of input-output accounts into the general framework or by supplementing the national income accounts by a separate system of input-output accounts. If projections on the basis of the national income accounts are to be made in a fully employed economy, there seems to be no alternative to accounting for total supply as much as for total demand.[19]

SECTORING, VALUATION, AND THE TREATMENT OF OTHER THAN MARKET TRANSACTIONS IN NATIONAL INCOME ACCOUNTING

As in normal business accounting, the prerequisite of a meaningful system of national accounts is that functionally similar or equal items receive the same kind of treatment and that functionally dissimilar items are separated so as to avoid confusion. Concerning national income accounting, this implies that the individual accounts should be devised in such a way that only transactions that are determined by similar or equal factors, that exert the same kind of influence on other transactions taking place in the economy, or that add to a meaningful total should be entered on the same accounts. If we have reason to

[19] See Richard Stone, "Multiple Classifications in Social Accounting," *Bulletin of the International Statistical Institute,* Vol. 39, Part 3, 1962.

assume that different groups of transactors react differently to identical occurrences, a differentiation between these groups reflected by the design of the accounting system should be made. If, on the other hand, we have reason to assume that the reaction of different groups of transactors is similar or equal with respect to certain changes and certain transactions, there is no reason for a separation of these groups in this particular context. If, at last, one group of transactors reacts differently to different kinds of changes in their situation or if different types of transactions of one group of transactors are determined by different factors, a separation should be made that is reflected by the structure of the accounting system.

These considerations are reflected by a more or less detailed disaggregation of the total transactions that are included in national income accounting. Total aggregation would prevail if all transactions that take place and that are considered in the general context of national income accounting are entered in one and only one account. If all transactions undertaken by each group of transactors were combined in one account, we would speak of total institutional aggregation. If all transactions of the same type were combined in one account, we would call this total functional aggregation. This latter type of aggregation, i.e., the combination of all transactions of like kind on one account, is typical for business accounting. In national income accounting both types of aggregation normally are applied simultaneously.

Specific problems are encountered whenever an extension of a particular system of national income accounting is considered. One particular type of sectoring, i.e., of account building, might be highly appropriate for the investigation of certain relationships. If additional problems are to be considered and if the system is to be extended correspondingly, the same type of sectoring might be completely inefficient. The degree of aggregation will need to be reduced to reflect several problems within one accounting framework. It is for this reason primarily, and not as a result of an unwarranted desire for perfection, that those systems that attempt to combine the national income accounts and the flow-of-funds accounts particularly seem to be unwieldy and complex when compared to the simple structure of the standard systems of national income accounting. The number of accounts is bound to be much larger in these extended systems for at least two reasons:

1. Since the relation that exists between a sector's current transaction and its stock of assets and liabilities must be considered, there is no

longer any possibility for a total functional aggregation of individual sectors.

2. Normally a larger number of different types of transactions, affecting each group of transactors in a different way and expressing different causes, will have to be treated separately. Such is the case, for instance, when the total redistributive activity of the government and the several social security institutions is to be made explicit in a special set of accounts.

Another consideration in this context is the desire for complete coverage. To avoid misunderstanding, this does not mean that all transactions that have taken place during the period under consideration should be considered irrespective of their type. What it does mean is that once the decision has been reached, that a certain type of transaction is to be considered in national income accounting, utmost care should be applied to insure that all transactions of this type are considered, irrespective of their legal or contractual form, as long as they serve the same economic purpose. The following basic kinds of transactions will need to be considered:[20]

a. Market transactions on a *quid pro quo* basis regardless of whether they consist of sales and purchases (the form typical for the more advanced economies) or of barter (a highly important form of market transaction in many economies).
b. Unilateral transactions that take place between different economic units and that are not accompanied by corresponding benefits to the economic units delivering these transactions (taxes, transfer payments, business subsidies, etc.).
c. Imputed transactions that either do not involve a transfer of commodities, services, and/or money between different economic units at all (consumption of home-grown commodities in agriculture, rents for owner-occupied houses, services of financial institutions, capital consumption, etc.), or for which such transfer cannot be measured and attributed to those benefiting (provisions for members of the armed forces, etc.).

One must admit that very often a great many assumptions must be made to give some idea of the size and importance, particularly for

[20] A very thorough discussion of the many problems created by the necessity to consider these different kinds of transactions and accounting items is to be found in Ingvar Ohlsson, *On National Accounting,* Stockholm, 1953, p. 73.

barter, and of the imputed transactions.[21] To anyone accustomed to the seeming accuracy of business accounting, the assumptions made in national income accounting might seem frightening.

Though complete coverage of all these transactions might be necessary, a line must be established between different types or groups of transactions to avoid equal treatment of functionally different transactions. Most important is the separation between those transactions which either represent a direct result of current economic activity in an economy or describe the disposal of the result of this activity, on the one hand, and those transactions which do not immediately result from economic and productive activity, such as those mentioned under (b). No general statement as to how this line of separation is to be determined is possible. It might well be that a certain type of transaction is considered a transfer-payment in one system of national accounting for reasons unique to the country using it and a return for participation in the process of production in the system of another country. This is the explanation for the differing treatments of interest on public debt in different countries.

This raises the added problem of valuation in national income accounting. As a matter of course, the need for uniformity and comparability enforces the use of the measuring-rod of money for all transactions and all items considered in national accounting. If all transactions considered consist of purchases and sales and if the decision-making bodies would consider market-price valuation sufficient for their purposes, there could not possibly be a problem of valuation for national income accounting. In fact, however, such a problem does exist both in business accounting and in national income accounting. In both cases transactions are recorded that do not correspond to actual market transactions at all or to market transactions taking place at the time the recording takes place (as in the case of depreciation or capital consumption). Thus, in addition to market prices, different measures of valuation are necessary. The two most simple kinds do have a definite relationship to present or past market prices. Both of these measures are used in business accounting as well as in national accounting. They consist either of using the market price of a particular item at some prior point of time or the market price of a similar item at the

[21] The Office of Business Economics does give some idea of the importance and the value of the imputations that are made in setting up the national income accounts. Office of Business Economics, U.S. Department of Commerce, *National Income,* 1954 Edition, p. 45.

same point of time. Valuation of capital consumption illustrates this. The value of capital consumption is either determined as the product of a fixed depreciation rate and the historical purchase price of the capital item in question or as the product of a fixed rate of depreciation and the present repurchase price of a like or similar capital item. In national income accounting, the second of these two alternatives is generally applied to this particular case. Use of the rule of valuation by analogy is made wherever possible, i.e., whenever transactions involving similar items take place on a free market at a price which is independent of the imputed transactions. There are, however, a great many cases in which valuation by this principle of analogy is almost impossible by definition. This is particularly true for the many services that are provided by government or public authorities for which no market and hence no market price exists. In this case the costs of production are used for the purpose of valuation in much the same way business uses costs of production for the valuation of part of its inventories.

In summary, to value the total product of economic activity in an economy and the total income received by the residents of a country, different kinds of transactions are considered and different measures of valuation are used. The measurement of these totals in constant prices, which may be necessary for certain statements and actions of economic policy, poses entirely different problems which will not be discussed here.

An additional problem which becomes a matter of crucial importance for the efforts made to integrate the system of national balance sheet accounts and the national income accounts arises because only those transactions that are a result of current economic activity and the current distribution and disposal of total income are reflected in national income accounting and in the system of flow-of-funds accounts. Once the assumption is made that total demand does depend upon the total value of assets as well as upon income, i.e., for both flows, such as income, and stocks, such as total assets, and that, in addition, the value of total assets and its changes are a result of both the nonconsumption of current earnings and realized capital gains and losses, additional information must be provided.[22] To receive a moderately complete view of the factors determining total demand, realized capital gains and capital losses and possibly unrealized capital gains and capital losses

[22] R. W. Goldsmith and R. E. Lipsey, *Studies in the National Balance Sheet of the United States, loc. cit.*, Vol. I, p. 119. Also, see J. Tobin, "Asset Holdings and Spending Decisions," *American Economic Review*, May, 1952.

must be considered. If, in addition, national accounting is to provide information of the material well-being of different groups in a society, it can no longer be restricted to giving a picture of the distribution of current income in any event. Current income and its distribution are but two of the factors determining the level of economic well-being of different groups.

Similar considerations must be given to the treatment of household investments. To this time, the acquisition of consumer durables by private households, with the exception of home construction, is not considered as investment and an addition to total assets and total wealth. As a result, differences in the actual standards of living, particularly in the context of an inter-country comparison, tend to be underestimated. Many problems of this kind are posed by the efforts undertaken currently either (1) to supplement the national income accounts with a separate system of national balance-sheet accounts or national wealth statements, or (2) to extend the national income accounts framework in such a way that the national balance-sheet accounts become part of it.

DIFFERENCES BETWEEN BUSINESS ACCOUNTING AND NATIONAL INCOME ACCOUNTING

To date, strong emphasis has been put on the similarities existing between business accounting and national income accounting. This might be carried even further by using the profit-and-loss statement of business accounting as a pedagogical device to explain the rationale behind one of the focal accounts of the national income accounting system, i.e., the national income and product account. This account can, without major difficulties, be derived conceptually by a consolidation of the profit-and-loss statements of all economic units that participate in creating the national product, i.e., all private and public firms, those parts of the public sector that partake or that are assumed to partake in production, and the like.[23]

Useful as this illustration might be as a pedagogical device to give a first introduction to national accounting, it could well be misleading when the analogy is carried too far. While the logic behind the national income and product account might well be explained by reference to a single firm's profit and loss statement, it must be remembered that the information needed to establish such a national account is not

[23] Richard Ruggles, *An Introduction to National Income and Income Analysis,* New York, Toronto, London, 1949, p. 50.

gained through a consolidation of all individual profit and loss statements in the economy under consideration. Entirely different sources of information must be used for the purpose of national income accounting. While the individual firm's profit and loss statement is a systematic and a highly condensed version of a total recording of all individual transactions the firm has experienced, no such information is available to those that must prepare national accounts. All they have at their disposal are highly aggregate statistics of product and income flows in the economy which are not even collected primarily for the purpose of national income accounting but rather are a kind of by-product of data-collection conducted for entirely different purposes. Even the best conceptual system of national accounts contributes very little to permit the sifting of information from such very different sources which differ so greatly in reliability in almost any economy and to facilitate the gathering of the data required.

Little claim for the accuracy of the entries in the several accounts can be made. Devices for checking statements must be developed in the course of data collecting and processing. There is no easy way to check the accuracy via the balance sheet in which the offsetting transactions are entered. Maddening as this chase for the lost cent might have been to those engaged in it in the precomputer days, double-entry bookkeeping did offer some guarantee as to the accuracy of the results achieved by virtue of its built-in checks. The same would be true for a two-entry system of accounting like national income accounting if complete and accurate information were available for all groups of transactors. This is not the case. A large part of the total entries can only be estimated as a difference between several totals known or assumed to be known since no more direct information can be made available. Estimates have been made of the potential deviations between the recorded figures and actual figures.[24] If such estimates are considered realistic[25] at all, there still remains the problem whether the individual errors are offsetting or cumulative and whether the bias introduced into the final figures of national accounting tends to be persistent in time

[24] Central Statistical Office, *National Income Statistics. Sources and Methods,* London, 1956, p. 33.

[25] The Office of Business Economics takes a strong stand in denying the possibility of any quantitative statements as to the reliability of the estimates of national income and product and its components such as made by the British Central Statistical Office. See Office of Business Economics, U.S. Department of Commerce, *U.S. Income and Output, loc. cit.*, p. 70. Also, Morris A. Copeland, "Statistics and Objective Economics," *Journal of the American Statistical Association*, Vol. 50, September, 1955.

or fluctuates. If the direction of the bias introduced through the basic errors and its importance remains unchanged, in the course of time a fairly reliable statement can still be made about the development of the several economic magnitudes. It is only when the direction and the relative importance of the bias introduced fluctuates between periods and countries that serious objections against the results achieved by national accounting can be based on this type of inaccuracy. Fortunately, there seems to be no reason to assume this case actually exists. Disappointing as they may be to one accustomed to the accuracy of business accounting, it should not be the potential mistakes and problems which afflict the measurement of national income, almost by definition, on which a judgment of the achievements reached in this field should be based. Far more important is the fact that information has been made available to those responsible for the conduct of economic policy that was unthought of but one generation ago. Present-day economic policy in the United States is a telling example of the inherent possibilities. The development of our insights into the functioning of the economic system which is assisted by the rapid development in the field of national accounting and which does in turn give stimuli to the further development in this field is a true indication of the importance this development has for economics.

*The Economic Accounting System of State Enterprises in Mainland China**

CHING-WEN KWANG†

INTRODUCTION

In the past several years there has been a great deal of discussion in mainland China of the meaning of "economic accounting" and its role in the management and control of state enterprises, in the scientific and party journals as well as in the daily press. A distinction is sometimes made between "economic accounting" (*ching-chi ho-suan*) and the "economic accounting system" (*ching-chi ho-suan chih*).[1] When the latter term is used, it denotes the system and procedures for the management of the state enterprises. It also appears that the implementation of the "economic accounting system" has not yet achieved

* The author wishes to acknowledge financial support from the Research Foundation of State University of New York, the Committee on the Economy of China of the Social Science Research Council, and the Ford Foundation during various stages in the preparation of this study. However, the conclusions, opinions, and other statements in this paper are those of the author only and in no way reflect the views of the abovementioned organizations. He also wishes to express his appreciation for the courtesies extended to him by The Hoover Institution of Stanford University where the research on this study was undertaken.

† Ching-wen Kwang, Professor of Business and Economics, California State College at Hayward, has participated in many professional meetings concerning the economy of Communist China. He also has written extensively in the area of mathematics and accounting.

[1] For example, Wang Mei-han, "On the Problem of Rigorously Carrying Out Economic Accounting in Industrial Enterprises," *Ching-chi Yenchiu (Economic Research,* abbreviated as *CCYC)* August, 1964, p. 29. "Strictly speaking, economic accounting, when conceived as the basic system for the operation of socialist enterprises, should be referred to as the 'economic accounting system.' "

complete success.[2] The discussion in the Chinese literature ranges over such questions as the meaning and content of economic accounting, the external conditions for the establishment of economic accounting in the state enterprises, and the relationship between economic accounting and other related economic concepts. Like its Soviet counterpart, Chinese economic literature is cast in Marxian nomenclature. It is only in the context of dialectic materialism and Marxian political economy that one can perceive the issues with which the writers are grappling. Also, mainly because of the preoccupation of Chinese economists and administrators with Marxian doctrines, much of the theoretical discussion has little operational significance concerning the actual planning and control of enterprise operations.[3]

The discussions in the Chinese literature, however, gradually shifted from the more philosophical aspects to what might be called the practical aspects of the problem.[4] In the recent literature, there were fewer disputes over the meaning of "economic accounting" and more attention was given to questions related to the implementation of the economic accounting system. In fact, there was little controversy over the proper interpretation of the concept of economic accounting in the accounting and economic literature of mainland China of the early 1950's. Most of the books and journal articles on the subject were devoted to the introduction of general accounting and "economic accounting" in the Soviet Union and the problems of their implementation in Chinese industry.[5]

[2] "The present problem is that, although economic accounting has been strengthened in most enterprises, it remains the weak link in enterprise management." *Ibid.*, p. 28.

[3] There has been controversy over such questions as (1) whether economic accounting is an "economic category" particular to socialism or whether it exists also under other forms of society; (2) whether "economic accounting" and "economic effects or results" are the same concepts; (3) what the objective conditions are for the existence of the concept of cost under socialism.

[4] "The recent discussions dealt very little with those problems which had been taken up more extensively in the past, such as whether economic accounting is an economic category or a method of management; the objective foundation of economic accounting; and the relationship between economic accounting and socialist economic laws. What have been discussed at greater lengths have been problems more penetrating than the above, or those which are more closely related to practice." Chin Li, "Recent Discussions of the Problem of Socialist Economic Accounting by Chinese Economists." *CCYC,* November, 1962, pp. 65-70. English translation in *Joint Publications Research Service (JPRS),* No. 17496, February 6, 1963.

[5] The Russian term is *khoziaistvennyi raschet*, abbreviated as *khozraschet*. See Nicholas Spulber, *The Soviet Economy,* New York, Norton, 1962, p. 56. Some examples of these early works are: *Basic Principles of Soviet Accounting* (fourth

The purpose of this paper is to examine the concept of "economic accounting" as it is used in mainland China and the implementation of the economic accounting system in the various state enterprises. Some evaluation of the effectiveness of the system as an instrument of management planning and control will be made. To provide the necessary background for readers who are not familiar with the Chinese economy, we shall first consider briefly the characteristics of state enterprises in China.

THE STATE ENTERPRISES IN THE CHINESE ECONOMY

Structure of the Economy and the State Enterprises

The structure of the Chinese economy was first outlined in the Common Program of 1949.[6] According to this plan, the economy was to be divided into five sectors: (1) the state sector, (2) the cooperative sector, which was described as the semisocialist sector in the Common Program but as part of the socialist sector in the 1954 Constitution, (3) the small private enterprise sector which consists of individual farms, handicrafts, and other small business units, (4) the private capitalist sector comprised of "national capitalists,"[7] and (5) the state capitalist sector consisting of joint state-private enterprises.

---

edition), translated by Chiang Hou-i and Wang I-lieh in *Hsin Kuai-chi (New Accountancy)*, March, 1951, through February, 1952; "The Economic Accounting System," translated by Chiang Hou-i, *New Accountancy*, August, 1951, pp. 1-7; *The Economic Accounting System in Industrial Enterprises*, translated by I Chiu and Kuan Chen in *New Accountancy*, September, 1951, through February, 1952, except January, 1952; *Economic Accounting, Profits, Costs, and Prices*, translated by Feng Chih-nung, Peking, The Finance Press, 1958; Ling Ta-ting and Fang Nai-ho, "The Relationship Between Accounting and Statistics in National Economic Accounting," *New Accountancy*, March, 1951, pp. 24-26; Wu Chun-shih, *An Introduction to the Economic Accounting System*, Shanghai, Li-shin Accounting Books and Supplies Co., 1952; Shanghai Academy of Finance and Economics, "The Concept of Economic Accounting," in "Lectures on Basic Accounting," *Kung-yeh Kuai-chi (Industrial Accounting)*, January, 1958, pp. 25-29.

[6] The English text of the Common Program is published in *The Important Documents of the First Plenary Session of the Chinese People's Political Consultative Conference*, Peking, Foreign Languages Press, 1949, pp. 1-20. It may also be found in *Current Background (CB)*, No. 9, September 21, 1950.

[7] In Chinese nomenclature a distinction is drawn between the "bureaucratic capitalists" and the "national capitalists." The properties of the former were to be appropriated by the state while those of the latter were allowed to remain in the hands of their owners. The conditions under which private enterprises were permitted to operate immediately after the establishment of the Peking government were set forth in "Provisional Regulations for Private Enterprises, Government Administration Council (GAC), December 29, 1950." See *Compendium of Laws and Regulations Regarding Financial and Economic Policies of the Central People's Government, 2nd Series*, compiled by the

Included in the state sector are mining, transportation, banking, state farms, and all enterprises considered to be "vital to the economic life of the nation and to the livelihood of the people." The state enterprises consist of both commercial and industrial enterprises. These had either been government-owned under the Nationalist government or were newly formed by the Peking government. The state was to coordinate and regulate the activities of the various economic sectors. The state sector was described in the Common Program as the "leading force of the entire social economy."

The economic organization outlined above was intended to be of a transitional nature.[8] The ultimate intention to socialize the private sector was indicated in the Common Program and detailed in the Constitution of 1954.[9] The policy of "socialist transformation" involves (1) the transition from private management to joint state-private ownership and operation of private enterprises in industry, commerce, handicrafts, and transportation, (2) the organization of producers' cooperatives in both farming and handicrafts, and (3) the restriction and gradual elimination of "rich peasants." Peking claimed that by July, 1956, socialist transformation was completed in about 80 percent of all industrial and commercial enterprises and handicraft businesses.[10] By early 1957, the process was apparently completed.[11]

Finance and Economics Commission, GAC, Peking, 1951, pp. 141-48; "Measures for the Implementation of the Provisional Regulations for Private Enterprises; Finance and Economics Commission, GAC, March 30, 1950," *ibid.*, pp. 148-76.

[8] The transitional nature of the private capitalist sector, which was to be replaced by a joint state-private enterprise sector and ultimately completely socialized, was widely discussed in Chinese literature. See, for example, Ti Chao-pei, "Socialist Economic Development and Economic Laws in the Transitional Period," *CCYC*, July-August, 1956, pp. 1-10; Wu Chiang, "The Transformation from Capitalism to State Capitalism," *CCYC*, March-April, 1956, pp. 54-99; Kuan Ta-t'ung, "Some Problems in the Peaceful Transformation of Capitalist Industry and Commerce," *CCYC*, March-April, 1956, pp. 40-53.

[9] Article 31 of the Common Program states that "whenever necessary and possible, private capital shall be encouraged to develop in the direction of state capitalism." See English translation in *CB*, No. 9, September 21, 1950, p. 8. Article 6 of the Constitution declares that "state-owned economy is . . . the material basis on which the state carries out socialist transformation," while Article 10 states that "the policy of the state toward capitalist industry and commerce is to use, restrict, and transform them." See *CB*, No. 297, October 5, 1954, pp. 3, 4.

[10] "Directive on Questions in the Socialist Transformation of Private Industry, Commerce, Handicrafts, and Transport, State Council, July 28, 1956." See translation in Chao Kuo-chun, *Economic Planning and Organization in Mainland China: A Documentary Study 1949-1957*, Cambridge, Massachusetts, Harvard University Press, 1959, p. 21.

[11] Chou En-lai, "Report on the Work of the Government," Fourth Session of the First National People's Congress, June 26, 1957, see *CB*, No. 463, July 2, 1957, p. 1.

The state enterprises in China were first classified into three categories: (1) those under the direct control of the central government, (2) those owned by the central government but temporarily entrusted to local governments or other agencies for administration; and (3) those assigned for control by the local governments or other agencies.[12] Those enterprises which are directly operated by the central government are called the "state enterprises" (*kuo-ying chi-yeh*); while those operated by local governments are referred to as "local enterprises" (*kuo-ying ti-fang chi-yeh*). In general, local industrial enterprises are of small or medium size and are in the field of light industry.[13]

Like its Soviet counterpart, the state enterprise in the Chinese economy operates as an autonomous unit. It is described as having independence in its operations subject to the "centralized leadership and unified plans of the state."[14] The activities of an individual enterprise must comply with the requirements laid down in the national economic plan and are coordinated with those of other economic units. Both the rules of its operation and the scope of its activity are determined by the central authorities. But within the centrally established framework, the enterprise carries on economic activity on its own responsibility. Each enterprise is an independent accounting unit and is expected to cover its expenses from its own revenues.

To enable the state enterprises to carry out their production tasks, both fixed assets and working capital are provided by the state. In Chinese economic and financial literature, the resources of an enterprise are generally classified into two groups: the fixed assets (*ku-ting tsu-ch'an*) and the liquid, or circulating, funds (*liu-tung tzu-chin*).[15] Fixed assets consist of plant and equipment, mineral resources, transportation and communication facilities, and other long-lived means of production. The liquid funds consist of raw materials, work in process, fuels, spare parts and supplies, and so forth. Part of the liquid funds is supplied by the state and is called "fixed liquid funds" (*ting-o liu-*

[12] "Decision Concerning the Unification of Financial and Economic Work, Government Administration Council, March 3, 1950," in *Compendium of Laws and Regulations Regarding Financial and Economic Policies of the Central People's Government, First Series,* Peking, 1950, p. 29.

[13] "Resolution on Production and Construction of State Industrial Enterprises in 1951, GAC, April 6, 1951," *Compendium . . . , Third Series,* Peking, 1952, pp. 594-95.

[14] Jen Pei-ching, "On the Economic Accounting System," *Jen-min Jih-pao, (People's Daily),* November 14, 1961. See *Survey of China Mainland Press, (SCMP),* No. 2631, December 4, 1961, p. 11. Chi Wu, *A Handbook of Economic Accounting,* Peking, Kung-jen Ch'u-pan She, 1953, pp. 1, 2.

[15] See, for example, Chi Wu, *op. cit.,* p. 6; Jen Pei-ching, *op. cit.,* p. 8.

tung tzu-chin, which may also be translated as "quota liquid funds") or "owned liquid funds" (*tzu-yu liu-tung tzu-chin*). The term "fixed" is used to indicate that the amount of such liquid funds is set at a level just sufficient to fulfill the production tasks assigned in a single production cycle. The amount of the fixed liquid funds, however, is not always constant. It may be increased by additional appropriations by the state. Any requirement above the minimum, for temporary or seasonal reasons, is to be financed by bank loans. The working capital supplied by bank credit is called "borrowed liquid funds" (*chieh-yung liu-tung tzu-chin*) or "nonfixed liquid funds" (*fei-ting-o liu-tung tzu-chin*). Since 1959, however, all working capital needs of the state enterprises have been financed through loans by the People's Bank.[16] Interest is charged on all working capital loans extended by the bank. The earlier distinction between "fixed liquid funds" and "nonfixed liquid funds" is maintained. The amount of fixed liquid funds for an enterprise is determined by the Ministry of Finance or its subordinate bureaus and the People's Bank; the size of loans to be made for nonfixed liquid funds is the responsibility of the Bank alone.

Except in technical accounting literature, the distinction between "funds" (*tzu-chin*) in the sense of "uses of funds" and its use in the sense of "sources of funds" is not always clear, although the meaning of the term can usually be determined from the context.

In technical accounting literature, the terms "fixed capital or funds" (*ku-ting tzu-chin*) and "liquid capital or funds" (*liu-tung tzu-chin*) are sometimes used when the intention is to indicate the sources of financing for assets.[17] The distinction is clear in terms of balance sheet account classification: both "fixed capital" and "liquid capital" are net worth accounts, while the physical properties acquired are recorded in asset accounts. The "liquid funds" invested by the state in principle are intended for working capital purposes only and are not intended for capital construction, major repairs, or the acquisition of equipment.[18]

Over the years, many changes have been made in the form and presentation of the balance sheet for state enterprises; these changes

[16] "Regulations Concerning Several Problems in the Work of the Credit Department of People's Communes and the Liquid Funds of State Enterprises, State Council, December 20, 1958," *Compendium of Laws and Regulations of the People's Republic of China, July-December, 1958,* Peking, 1959, p. 158.

[17] For instance, Li Hung-shou and Chu Shih-chieh, *Elementary Accounting,* Shanghai, Li-hsin Accounting Books and Supplies Co., 1951, pp. 264-65.

[18] Li Cheng-jui and Tso Chun-tai, "Several Problems Concerning Economic Accounting in Socialist Enterprises," *Hung-chi (Red Flag),* October 1, 1961, p. 22. Translation in *JPRS,* No. 11326, December 4, 1961.

seem to follow Soviet practice. For example, the account category "Current Assets" is no longer shown as a major classification in the balance sheet.[19] Raw materials, accessory materials, and work in process are now classified as Quota Assets (*ting-o tzu-ch'an*) while cash on hand and bank deposits are classified separately as Monetary Funds (*huo-pi tzu-chin*).

Each enterprise has the right to use the assets allocated to it by the state. It is responsible to the state for all the resources at its disposal. The assets of an enterprise cannot be transferred, sold, or given away without the approval of its superior administrative agency. Moreover, the products of the enterprise must be distributed in accordance with state plans at prices set by the state. The enterprise is not allowed to dispose of its products otherwise without prior authorization. It must submit financial statements to various superior agencies from which it receives directions for operations. The major administrative personnel of an enterprise are appointed by its superior agency. The number of workers, the wage scale, and the grading system for its employees are all established by the central authorities. In transactions with other economic units, the enterprise acts as a legal person. It can enter into contracts with other economic organizations and is required to fulfill its obligations under such contracts. The settlement of interfirm transactions is to be made through the People's Bank. Each enterprise is required to maintain a clearing or settlement account at the Bank.

The operation of the state enterprises is directed to the fulfillment of goals established by the higher authorities. These goals or planned tasks are expressed in terms of the "planned targets" or "control figures" in the enterprise's plans, which are required to be accomplished. Among the planned assignments are the volume of output, gross value of output, the product mix, product quality, costs and profits, and labor productivity. Planning of the activities of an enterprise is conceived as the means to ensure the "comprehensive fulfillment and overfulfillment of the national economic plan"[20] which en-

[19] Comparison can be made between the sample balance sheet shown in *Principles of Accounting,* Peking, China Finance and Economic Publishing House, 1962 (authors not known), translation in *JPRS,* No. 19756, June 19, 1963, pp. 92-93, and those shown in (1) Li Hung-shou and Chu Shih-chieh, *op. cit.,* p. 282, and (2) "Draft Uniform Accounting System for Subordinate Enterprises and Economic Agencies of the Ministry of Textile Industry," *New Accountancy,* February 1951, p. 19.

[20] Ma Wen-kuei, "China's State-Owned Industrial Enterprises — Their Nature and Tasks," *Peking Review,* June 26, 1964, p. 26.

compasses the fulfillment or overfulfillment of the enterprise output plan, the lowering of its cost of production, and the fulfillment of its profit plan. It is recognized that profits from state enterprises are a major source of revenue for the state and also serve as an important indicator of managerial performance.

The state enterprises are allowed limited freedom in their production activities. For example, if an enterprise finds it has excess capacity after its production plan has been approved, it may accept local orders or orders from other enterprises provided that the following conditions are met:[21] (1) the tasks assigned by the state plan are first fulfilled, (2) such additional production is approved by the higher administrative agencies, (3) raw materials needed for such production can be obtained locally or can be supplied by the other economic units so that no materials allocated to it under the state plan will be used, and (4) what is known as the "principle of exchange of equal values" is adhered to in such transactions. The state enterprises are also allowed to exchange raw materials and supplies if such an exchange would make possible an increase in the production of goods called for by the national economic plan. These exchanges, however, are to be made in accordance with state regulations and only if the standards of output can be maintained.

The Preparation of Enterprise Plans

The link between enterprise economic accounting and national economic planning lies in the formulation of enterprise economic plans; planning the activities of the enterprise is the device to ensure that the enterprise will fulfill the tasks assigned by the central authorities.

The annual production tasks determined by the central planning authority are transmitted to the enterprise through administrative channels in the form of control figures or targets.[22] These control figures include (1) the gross value of output in constant prices, the value of commodity production at factory sales prices, and output in physical terms, (2) number of employees, wages, and labor productivity, (3) percentages of cost reduction for various products, and (4) estimates of receipts, expenditures, and profits.[23] The enterprise formulates its plans on the basis of these control figures. Clearly, the enter-

[21] *Ibid.*, pp. 24-25.
[22] For a brief survey of Chinese national economic planning procedures, see *UN Economic Survey of Asia and the Far East 1957*, Bangkok, 1958, pp. 86-90.
[23] As in other matters concerning Chinese economic planning, reports on exactly what items are included in the control figures are not completely consistent. See, for example, the discussion in Chao Kuo-chun, *op. cit.*, pp. 2-3, 66.

prise plan is essentially an elaboration of the ways and means to carry out the production tasks assigned by the central authority.

Within an enterprise, the drafting of the plans is done by its subdivisions: the plant, workshops, and work teams. In the case of a multiplant enterprise, each plant or factory receives the control figures and plan directives from the central management. The plant management then draws up a preliminary plan for the fulfillment of the assigned tasks. It is claimed that the preliminary plan is then passed on for discussion and revision, successively, by the factory labor union, the workshops, and the work teams. The plans for the workshops and the work teams are drawn up in this process. Finally, on the basis of the suggestions made by labor unions and subordinate divisions, the plant management prepares the revised provisional plan for transmittal to the head office of the enterprise.

The draft plans prepared by the enterprise are then submitted to its superior administrative agencies for review and approval. The long-range plans — e.g., the five-year plans — are under the supervision of the State Planning Commission, while the annual plans are prepared under the direction of the State Economic Commission. The enterprise plan, as an integral part of the economic plans of the relevant ministries, provinces, autonomous regions, and muncipalities, is subject finally to approval by the State Council in its review of the national economic plan drafted by the central planning commissions. The final plan is sectionalized and transmitted to the individual enterprises through the hierarchy of administrative agencies. Before the final plans are received, the enterprises are authorized to carry on its activities in accordance with the provisional plans which they have submitted.

The economic plan of the enterprise has the force of law after its approval by the State Council, and the enterprise is required to fulfill or overfulfill it. In the course of its implementation, however, the enterprise plan is subject to periodical reexamination and, if deemed necessary, subsequent modification.

Types of Enterprise Plans

The plan of the enterprise embodies a set of goals or targets which are also referred to as indicators (*chih piao*) and seeks to specify the means for their attainment. The economic plan for an industrial enterprise is not exactly the same for all industries. In general, the enterprise plan consists of the following parts:[24]

[24] "Chi Wu, *op. cit.*, pp. 38-42; Chang Chao-chen and Li Po-jan, *The Theory and Practice of the Economic Accounting System*, Peking, Wu-shih Nien-tai Chu Pan She, 1953, pp. 66-179; Ma Wen-kuri, *op. cit.*, p. 14.

1. *The production plan* is the core of the enterprise plans. It specifies the product mix, the quality specifications for each product, the volume, and the value of outputs. The value of output is expressed on two different bases: the gross value of output in constant prices and the gross value of output at factory sales prices. The latter is used to derive estimated revenues from sales in the financial plan. Included in the outputs are not only finished products but also such activities as the installation of capital equipment, major repairs, and services rendered to other enterprises.

2. *The labor and wages plan* establishes the number of workers to be employed by the enterprise, the corresponding payroll, and targets for the increase in labor productivity. The plan includes estimates of increased demand for labor and seeks to assure the needed supply of workers. For production workers directly employed in the workshops, the total number of workers required is estimated from the output targets and estimated labor productivity. Programs for increasing labor productivity and personnel training may also be included in the plan.

3. *The procurement plan* determines the quantity of materials required to fulfill the output plans, based on input standards. The objective of the procurement plan is to economize on materials usage and to assure the flow of needed supplies. The end product of the procurement plan is the "materials balance schedule" which summarizes the different types of materials required and their sources of supply in both physical and monetary terms. The major sources of supply are: production by its own plants, items provided through contracts made with other enterprises, items from state trading organizations of a higher level, and purchases made in the market.

4. *The cost plan* establishes the "planned cost" for each individual product of the enterprise by setting usage norms for raw materials, supplies, fuels, etc. The total costs for the planned output are then determined from the individual product cost plans. Direct materials and direct labor costs are computed from technical specifications and standard prices. General and administrative expenses of the workshop and the factory are estimated on the basis of total direct labor cost. The intended purpose of the cost plan is to achieve reductions in costs and to control the "actual costs" of production. The concept of "cost control" (*cheng-pen kuan-li*) consists in the supervision of expenditures by the finance division in accordance with the cost plan. Both the purposes for which disbursements are made and their amounts are expected to conform with the provisions of the cost plan.

5. *The financial plan* consists of the plan for receipts and disbursements, the sales plan, profits plan, and the calculation of working capital needs. Its purpose is to determine the sources of funds for the enterprise and to control their utilization. It reflects both the financial result of operations of the enterprise and the payments into and appropriations received from the state budget.

The sales plan is sometimes referred to as the output distribution plan. Its purpose is to schedule in advance the distribution of the output of the enterprise. Outputs may be used in the same enterprise for further production or capital construction and maintenance, for delivery in accordance with contracts made with other enterprises or to state trading organizations of a higher level, and for sale in the market. Total expected revenues from sales are derived from these computations. The value of output used for capital investment and maintenance is included in the projected total sales revenue of the enterprise.[25]

The formal financial receipts and disbursements plan is in essence a projected statement of sources and uses of funds. A sample plan is shown in Figure 1.

6. *The technology and organization plan* is used to specify programs for improvements in technology and the organization of the production process. Such programs include quality control, measures to increase the intensity of utilization of plant capacity and to improve the operation of storage facilities, shipping, and the safekeeping and maintenance of machinery and equipment. Its purpose is to ensure the attainment of the following objectives: (1) fulfillment of the output plan, (2) economy in the use of resources, (3) improvement in product quality, and (4) increase in labor productivity.

7. *The basic construction plan* is similar to the capital budget in Western business usage. The concept of "basic construction" (*chi-pen chien-she*) includes (1) the construction of new fixed assets, (2) betterments and additions to existing fixed assets, and (3) rehabilitation of fixed assets damaged by war or other causes.[26] The last two categories are distinguished from "capital or major repairs" in Chinese usage in much the same way as in accepted Western practice. Betterments and additions increase the productive capacity of the fixed assets whereas capital repairs simply restore the original capacity; rehabilitation is

---

[25] Chang Chao-chen and Li Po-jan, *op. cit.*, p. 138.

[26] A more detailed list of basic construction activities also includes the expenses for personnel training, the purchase of land and existing buildings, and the purchase and breeding of livestock, *ibid.*, pp. 166-67.

Figure 1. Financial Receipts and Disbursements Plan

Period Covered

(in thousands of People's Currency (Y))

Proceeds from sales		630,000	Cost of production	546,700
Including:			Basic construction	15,800
A. Taxes	21,000		Capital repair	180
B. Depreciation fund:			Balance of capital repair fund transferred out at end of current period	800
1. Depreciation	3,400		Additions to liquid funds	8,200
2. Capital repair	900		Planned loss	0
C. Profits	58,000		Payment to enterprise bonus fund	1,280
Balance of capital repair fund transferred from previous period		80	Residence, disbursements for	120
Residence, receipts from		120		
Excess liquid funds		250		
Receipt from change in price of fixed assets		50		
		630,500		573,080

Relationship with the state budget

Excess of disbursement over receipts Appropriations from state budget:		Excess of receipts over disbursements Payment to state budget:	
Basic construction fund	15,800	Profits	56,720
Additions to liquid funds	8,200	Depreciation	3,400
Appropriation to cover planned loss	0	Taxes	21,000
		Excess liquid funds	250
		Receipt from change in price of fixed assets	50
Total	24,000	Total	81,420
Grand total, receipts	654,500	Grand total, disbursements	654,500

Source: Adapted from Chang Chao-chen and Li Po-Jan, *op. cit.*, p. 165.

performed for fixed assets which have ceased to operate while major repairs are made on fixed assets currently being used in production. Major repairs are financed directly from funds made available by the funding of provisions for depreciation; funds for basic construction are appropriated through the state budget. Although the annual depreciation provision also covers funds needed for basic construction, these funds are first paid into the state treasury and separate appropriations are made in the state budget.[27]

Corresponding to the national economic plans, there are also a long-term basic construction plan and an annual basic construction plan. The enterprise long-term basic construction plan is based on the long-term plan for the development of the national economy prepared by the central planning authorities. The procedure in the preparation of the annual basic construction plan follows the same pattern established for the formulation of output plans. Control or target figures for basic construction are issued from the central planning authorities and passed down to the enterprises through the administrative hierarchy. The detailed plans are prepared by the industrial enterprises and are then submitted for review and consolidation by successively higher administrative agencies. When approved, the authorized plans are returned to the enterprise.

The preparation of the long-term construction plan is divided into four stages: (1) the preparation of a preliminary statement of the plan, (2) basic planning, (3) technical design and planning, and (4) preparation of the detailed work plan.[28] Each stage can be undertaken only after the preceding stage or stages have been approved by the superior administrative agency. The detailed work plan, however, does not require authorization by any superior agency but needs only to be signed by the chief engineer in charge of technical design and planning. The preliminary statement sets forth such matters as the products to be produced, scale of operation, duration of the construction project, investment required, supply of raw materials, and sales prospects. The other documents in the planning process are further elaborations of the basic construction project.

The annual basic construction plan is summarized, in general, in the following schedules: (1) total basic construction, (2) components of basic construction, (3) basic construction labor plan, and (4) basic construction materials supply plan. The schedule of total basic con-

---

[27] See Figure 1.

[28] Chang Chao-chen and Li Po-jan, *op. cit.*, pp. 169-71.

struction summarizes all construction projects undertaken by the enterprise, sets forth the value of basic construction planned for the current year, and shows the estimated completion of the projects in the current year in terms of both capacity and fixed assets. The schedule of components classifies the basic construction work by major categories such as building and installation, machinery, and equipment. The basic construction labor plan shows the number of workers and other employees required for both construction undertaken by the enterprise as well as work sublet to others, total wages, and average wage rates. The schedule of materials supply shows the quantity of different kinds of materials required and their sources of supply, and beginning and ending inventories.

In addition, the economic plan of the enterprise may also include plans for the maintenance and repair of plant and equipment, transportation, the design and pilot production of new products.

Different time periods may be covered by the plans of the enterprise. First, there may be long-term plans (e.g., the five-year plans) which are known as "perspective plans." There are also annual, quarterly, and monthly plans (the quarterly and monthly plans are also called "operational plans"). In general, plans covering a shorter period of time are drawn up on the basis of the long-term plans. The short-term plans seek to elaborate, in more detail, programs for the implementation of the long-term plans. The amount of detail included in the plan increases as the time period becomes shorter. Within a single plant, a daily schedule of assigned tasks may be compiled from the enterprise plans. The schedule sets forth the daily tasks assigned to the workshop, its work teams, and each individual worker. Within certain limits and subject to review and approval by superior administrative agencies, the enterprise plans may be modified because of changes in external environments.

DEVELOPMENT OF THE CONCEPT OF "ECONOMIC ACCOUNTING"

The Chinese concept of "economic accounting" originated from the Soviet Union.[29] In fact, the measures adopted in China to establish the "economic accounting system" are largely identical to their Soviet

[29] See Spulber, *op. cit.*, pp. 55-56, and Robert W. Campbell, *Accounting in Soviet Planning and Management,* Cambridge, Massachusetts, Harvard University Press, 1963, pp. 12-13, for a brief discussion of Soviet economic accounting. The only discussion of Chinese economic accounting available in English appears in Professor Yuan-li Wu's *An Economic Survey of Communist China,* New York: Bookman Associates, 1956, pp. 202-13, and *The Economy of Communist China — An Introduction,* New York, Praeger, 1965, pp. 63-65.

counterparts.[30] It is claimed that economic accounting in a rudimentary form — such as the maintenance of statistical records and cost computations — was being practiced in publicly owned industries in liberated areas during the war with Japan.[31] The basic ideas of economic accounting were set forth by Mao Tse-tung in a paper prepared for the Conference of Senior Party Cadres in the Shensi-Kansu-Ninghsia Border Region in December, 1942.[32] Economic accounting was proposed as one of the measures in a program to develop and improve industrial management for purposes of achieving economic self-sufficiency. Mao listed five requirements for the establishment of the economic accounting system: (1) the endowment of an adequate amount of capital to each enterprise so that its operations would not be hampered by lack of funds, (2) the institution of definite procedures to account for receipts and disbursements, (3) the establishment of procedures for the accounting of cost or, if possible, of a cost accounting system, (4) the establishment of an "inspection system" under which the fulfillment of enterprise plans would be checked and reviewed periodically,[33] and (5) a program to insure the economical usage of raw materials and the proper maintenance of tools and equipment. It was envisaged that the economic accounting system, when established, would serve as the means to ascertain the profitability of the operation of an enterprise.

Two other measures, although not mentioned by Mao as constituents of the economic accounting system, were later regarded by Chinese writers as important parts of the program.[34] The first is the idea of centralized planning for the productive activities of all public enterprises. The Office of Financial and Economic Affairs of the

[30] This can be seen from the discussion on the Soviet economic accounting system in Chang Chao-chen and Li Po-jan, *op. cit.*, pp. 7-13, and the translation of Russian articles included in the collection of essays *The Economic Accounting System,* Peking, Hsin-hau Shu-tien, 1950. See also the works cited in footnote 5.

[31] Tso Chun-tai, "The Establishment and Development of the Economic Accounting System in China," *Ta-kung Pao,* Peking, June 1, 4, 6, and 8, 1962. Translation in *SCMP,* No. 2767, June 27, 1962, pp. 1-9; Chang Chao-chen and Li Po-jan, *op. cit.*, p. 15.

[32] Mao Tse-tung, "On Developing 'Self-Sufficiency' Industry," in *On Economic and Financial Problems,* Hong Kong, New Democracy Press, 1949, p. 114. The Chinese term "self-sufficiency industry" (*tzu-chi kung-yeh*) is used to indicate that these industrial undertakings were established for the purpose of achieving economic self-sufficiency. *Ibid.*, p. 99.

[33] The Chinese term is *chien-ch'a chih-tu.* The proposal would constitute a part of what is known in modern management literature as an "operations audit system."

[34] Mao, *op. cit.*, pp. 113-15.

Border Region Government was urged to supervise the development of a unified plan for the operation of the public industrial enterprises. As described by Mao, the plan would set output targets and provide for the uninterrupted flow of raw materials, supplies, and distribution of products. There was also to be unified audit and review of plan execution by the enterprises. Second, the organization and management of the public enterprises were to be improved. Foremost among the specific measures suggested was the elimination of "bureaucratic tendencies" in the factories. The public enterprises were to be put on a strictly "businesslike" basis in their operations; that is, instead of depending on appropriations from the government, the enterprises were to meet their expenses from their revenues. In addition, a system of awards and sanctions and a progressive piece-rate for wages were suggested as the means to promote labor enthusiasm and thereby increase production. In the post-1949 period as the industrialization of mainland China progressed, the concept of economic accounting assumed new significance and content.

Based on Soviet theory and experience, the economic accounting system in China was first introduced on a large scale in the industrial enterprises under the jurisdiction of the Ministry of Industry of the Northeast People's Government. Beginning in the latter part of 1949, a number of directives establishing the economic accounting system were issued by the Ministry.[35] These directives required the physical inventorying of assets, the establishment of a statistical reporting system, financial and cost accounting, budgetary control, the establishment of production and cost standards, and the proper assignment of responsibility to individuals within the organization structure. Together with these concrete proposals were the usual exhortations to rely on the masses, practice economy, initiate production emulation campaigns, establish an incentive system, and allow the participation of workers and other employees in management.

On the national level, the call for economic accounting was made in 1951 by the Government Administration Council. Prior to this,

[35] "Resolution on Strengthening the Economic Accounting System and Carrying Out the Struggle Against Inefficiency and Waste, July 29, 1949"; "Directive on the Continued Implementation of the Economic Accounting System, September 23, 1949," in *The Economic Accounting System, op. cit.*, pp. 95-103, 104-14; and "Resolution on the 'Production Responsibility System' February 28, 1950," in *Compendium of Laws and Regulations Regarding Financial and Economic Policies of the Central People's Government, First Series*, pp. 477-81; "Three Problems in the Implementation of the Resolution on the Production Responsibility System," *ibid.*, pp. 481-85. See also "How to Carry Out the Economic Accounting System," *Northeast Daily*, March 7, 1950, *ibid.*, pp. 473-77.

a number of regulations and decrees concerning economic policy and the administration of government agencies and state enterprises were promulgated by the Peking government; these are considered by Chinese writers either to constitute a part of the economic accounting system or to lay the foundation for the implementation of that system.

First are the monetary controls (*huo-pi kuan-li*) which encompass cash control, the clearing and settlement of claims, and control over short-term credit.[36] State enterprises, government agencies, the armed forces, and cooperatives are all required to retain only a minimal amount of cash on hand. Receipts in excess of this amount must be deposited with the People's Bank or its authorized agents, usually on the same day. Government agencies are urged to make purchases or sales through state enterprises or the cooperatives in order to minimize the use of currency. All government units are required to prepare monthly and quarterly cash budgets.[37] The People's Bank supervises the execution of the cash plans and is responsible for the clearing and settlement of claims among government agencies and enterprises. All state enterprises and other government units engaged in business activities must open clearing or settlement accounts with the Bank; current accounts are established for other government agencies. Transactions among government units must be settled through the clearing system of the Bank except for those specifically authorized to be settled in cash. A duplicate copy of each contract signed between government units must be deposited with the Bank. The Bank is also the only source of legitimate short-term credit. Government agencies and state enterprises may not extend credit to one another. These measures were designed so that the People's Bank could exercise detailed control over the financial activities of the enterprises in accordance with previously devised plans.

Beginning in March, 1950, efforts were made to establish uniform accounting systems in state enterprises.[38] Regulations were also issued concerning the preparation and review of the budgets and final accounts of all government agencies and the investment plans of state

[36] The relevant documents are "Resolution on Cash Control for all Government Agencies, GAC, April 7, 1950," in *Compendium . . . , First Series*, pp. 237-38; "Regulations for the Implementation of Monetary Control, Finance and Economics Commission, GAC, December 25, 1950," *ibid.*, pp. 549-60; "Regulations on the Preparation of Monetary Receipts and Disbursements Plan, FEC, GAC, December 25, 1950," *ibid.*, pp. 561-76.

[37] The Chinese term is "monetary receipts and disbursements plan."

[38] Chang Hsin-chou, "The Accounting System of State Enterprises in the Past Ten Years," *Enterprise Accounting*, September, 1959, p. 3. Translation in *JPRS*, No. 2077, December 18, 1959.

enterprises.[39] A general census of all industrial and mining enterprises was also undertaken in mid-1950.[40]

The directive issued by the Government Administration Council in 1951 specified five methods for establishing the economic accounting system for industrial enterprises:[41] (1) the planned management of state enterprises which involves the setting of targets for production, labor productivity, and cost reduction, and the establishment of the "inspection system" to ensure the attainment of these goals, (2) the determination of the required amounts of fixed and working capital for each enterprise and the allocation of any excess funds among the enterprises showing inadequacies, (3) the establishment of an independent accounting system, the centralized handling of all credit transactions among state enterprises by the People's Bank, and the assumption of responsibility by the manager of each enterprise for its profit performance, (4) the granting of the right to the enterprises to enter into contracts for the purchase of raw materials and the sale of its finished products, and (5) the institution of the factory bonus fund plan which provides for a bonus (equal to a given percentage of the amount earned above planned profits) for the overfulfillment of profit plans.

On June 1, 1951, the Finance and Economics Commission issued a directive on the physical stock-taking of assets and the determination of the capital of state enterprises.[42] Provisional measures for carrying out this work were promulgated on August 3; on July 1, both the Ministry of Railroads and the Ministry of Heavy Industry issued regulations for the implementation of economic accounting in government units under their respective jurisdictions.[43] With these developments the economic accounting system may be said to have been formally established; in subsequent years, further revisions and changes were

[39] The relevant regulation is "Resolution on the Final Accounts System, the Review and Approval of Budgets, the Detailed Plans for Investment, and Monetary Control, GAC, December 1, 1950," *Compendium . . . , Second Series,* pp. 271-73.

[40] "Directive on the General Census of State Industrial Enterprises, Joint State-Private Industrial Undertakings, and Industrial Cooperatives, Finance and Economics Commission, GAC, March, 1950," *Compendium . . . , First Series,* pp. 458-59.

[41] "Resolution on the Production and Capital Construction of State Industrial Enterprises in 1951, GAC, April 6, 1951," *Compendium . . . , Third Series,* p. 596.

[42] "Resolution on the Census of Assets and Determination of Capital in State Enterprises, Finance and Economics Commission, GAC, June 1, 1951," *Compendium . . . , Third Series,* pp. 88-90.

[43] Chang Chao-chen and Li Po-jan, *op. cit.,* p. 21.

made. For example, the uniform accounting systems for different industries were being revised and supplemented continually by the Ministry of Finance and other government agencies.[44] During the "great leap forward" period (1958–1960), mass participation in accounting as well as in other management functions was initiated. Drastic simplifications of accounting systems and procedures were made in order to make it possible for workers in the factories and peasants in the people's communes to participate in such work.

The recent controversy over economic accounting began in the early 1960's. There are two major interpretations of the concept of "economic accounting."[45] On the one hand, it is held that economic accounting denotes the economic relationship between the state and the state enterprises. In this view (1) the state provides both fixed and working capital to the enterprises, (2) the production tasks of the enterprises are assigned by the state through the national economic plans, (3) the plans of the enterprises, when approved by their superior administrative agencies, have the force of law and must be followed, and (4) the enterprises assume responsibility for the resources entrusted to them by the state and carry on independent operations to fulfill their production plans. This interpretation is sometimes broadened to include the economic relationships among the state enterprises and those between the enterprises and their employees.

A different view holds that economic accounting is the basic principle or method for the planned management of socialist enterprises. It is conceived as the accounting for the results of all economic activities of an enterprise, directed toward the economical use of labor and material resources in order to "produce the maximum amount of output with the best possible quality for the satisfaction of expanding social needs."[46] These views are perhaps not as incompatible as they might first appear. Since central planning is a basic principle of Chinese economic organization, it is obvious that the state enterprises

---

[44] See Chang Hsin-chou, *op. cit.*, pp. 3-6.

[45] See, for instance, the review articles by Chin Li, "Divergent Views in Discussions on Economic Accounting under Socialism," *CCYC*, March, 1962, pp. 61-67, translation in *JPRS*, No. 15602, October 8, 1962, and "Recent Discussions of the Problem of Socialist Economic Accounting by Chinese Economists," *CCYC*, November, 1962, pp. 65-70, translation in *JPRS*, No. 17496, February 6, 1962. Also, "The Question of Economic Accounting — A Summing-up of the Views Expressed by Economists over the Past Year," *Ta-kung Pao*, Peking, December 25, 1961. Translation in *SCMP*, No. 2,660, January 17, 1962, pp. 4-6. Two additional interpretations of economic accounting were mentioned in the last article, but these are mainly variants of the two basic interpretations.

[46] Chin Li, "Divergent Views in Discussions on Economic Accounting under Socialism," p. 61.

must function within the framework of the national economic plan. Thus the operation of the state enterprises presupposes certain well-defined relationships with the state or the Chinese government. To understand the functioning of the enterprise requires a knowledge of the institutional framework prescribed by political authority. The second view seems to be in accord with the official regulations and directives concerning economic accounting, in which this concept is primarily associated with measures to improve industrial management in the state enterprises.

IMPLEMENTATION OF ECONOMIC ACCOUNTING IN STATE ENTERPRISES

The primary purpose of economic accounting is conceived as the attainment of maximum economic results from a minimum expenditure of labor and capital subject to the constraints of the policy and direction of the central authority. While there is still controversy among Chinese economists and administrators concerning the proper interpretation of various aspects of the concept of economic accounting, this discussion is limited to the major measures adopted in implementing the economic accounting system.

Preparatory Steps in the Establishment of the Economic Accounting System

1. The census of assets and determination of capital. Several preparatory steps are necessary for the actual introduction of the economic accounting system in an enterprise. The physical stock-taking and recording of all assets, the proper valuation of these assets, and the determination of the amount of capital required for the enterprise's operation are generally considered to be the first prerequisite.[47] It was emphasized that a physical inventory of assets should be taken regularly and a proper system of asset accounting be established so that effective control can be maintained. The provisional regulation issued in 1951 governing the valuation of assets specified that both fixed and current assets were, in general, to be revalued at replacement cost in terms of the People's currency as of the end of June, 1951.[48] For fixed assets, replacement cost was defined as the invoice price plus taxes, commissions, transportation costs; for current assets, it was the then-

[47] As late as 1962, there were still reports on stock-taking of inventories and other assets in industrial and other enterprises. See, for example, Wang Chi-mou, "House to House Check-up on Warehouse Inventories and Determination of Assets Carried Out in Shanghai," *Ta-kung Pao,* Peking, June 9, 1962, translation in *SCMP,* No. 2765, pp. 1-2.

[48] Chang Chao-chen and Li Po-jan, *op. cit.,* pp. 38-39.

current market price. No allowance for depreciation was deducted from replacement cost in the revaluation of fixed assets which were being used at the time. The amount of capital, or total resources, which was considered to be necessary for the operation of the enterprise was determined from its assigned production tasks. For fixed capital, the required amount was determined largely by the output plans and the technology of production. For working capital, the calculation of the required amount was based on the length of the production cycle (*sheng-chan chou-chi*) and the value of output.[49]

2. *Specification of methods and processes of production.* The selection of production processes for the manufacture of specific products and the detailed specification of methods of application is referred to as the "technical production specifications" (*chi-shu tso-yeh kuei-cheng*). These written statements of efficient processes for the particular products are intended to overcome the claim that, in the past, production work was carried on mainly on the basis of experiences passed along by older workers. The organization for production had seldom been scientifically scrutinized; as a result, waste and inefficiency occurred in the plant.

The specification of the technical process of production involves (1) the selection of technical methods to be employed, (2) the specification of the sequence of operations to be performed, (3) the setting of usage and quality standards for raw materials and quality standards for semi-finished and finished goods, (4) the utilization, maintenance, and safe-keeping of machinery and equipment, (5) product design and engineering, and (6) plant safety measures.[50]

3. *The setting of standards and control by standards.* The setting of standards for all aspects of the productive activity of the enterprise and the use of these to plan their employment and control is known as "control by standards" (*ting-o kuan-li*). The major types of standards are:[51] (1) output standards which set forth the output to be produced by a worker or a team in a given time period under specified technological conditions,[52] (2) raw materials consumption

[49] An example of the actual procedures used in a manufacturing company in the Northeast is given in Ch'en Li "An Introduction of the Implementation of the Economic Accounting System at the Chien-hsin Kung-ssu," in *The Economic Accounting System,* pp. 146-47, 150-52. See discussion below on the management of funds.

[50] Chi Wu, *op. cit.,* pp. 51-54; Chang Chao-chen and Li Po-jan, *op. cit.,* pp. 40-42.

[51] Chi Wu, *op. cit.,* pp. 31-32.

[52] A variant of the output standard is the "time standard" which specifies the standard time for the completion of a task. *Ibid.,* p. 32.

standards, (3) labor requirement standards which specify the number of workers required for the completion of a task, (4) quality standards which set requirements for grade of outputs as well as for allowable scrap and waste, (5) cost standards, and (6) working capital standards. Standards were set in the past on the basis of empirical estimates or statistical averages. It has been proposed that a more rational approach is to use an average of the records set by the most efficient workers and the general level attained by most workers as a standard.[53] The standards are revised as the technology and organization of an enterprise improve.

4. *The responsibility system.* The term "responsibility system (or systems)" has been used in Chinese literature in both a broad and a narrow sense. In the broader sense, it includes the specification of the rights and responsibilities of all economic units comprising the national economy. It thus refers to the relationship between the state and the enterprises and the relationship among the enterprises themselves or between them and other economic units, as well as the responsibility system within a single enterprise.[54] The former is referred to as the external responsibility system, the latter as the internal responsibility system.

The relationship between the enterprise and the state is described as the independent operation of the enterprises subject to the central direction and planning of the state. The responsibility system of the enterprises to the state seeks to specify the organizational relationship of a state enterprise to other government departments and ministries. The external responsibility system in regard to the interrelationship among the enterprises is intended to coordinate the activities of the enterprises in carrying out the national economic tasks. It is partly formalized in the national economic plan and partly manifested in the "economic contracts" entered into by the enterprises. The economic contracts are legally binding agreements between enterprises with respect to sales prices, quantity of sales, quality specifications, delivery time and place, and other rights and obligations of the parties involved. The contract system is a means to ensure the fulfillment of enterprise economic plans by planning in advance for the supply of raw materials, the sale of an enterprise's output, and by ensuring the attainment of quality standards, the observance of delivery schedules, and the prompt

[53] *Ibid.*, p. 33.

[54] Fei Wu-wen, Kuei Shih-Yung, Liu Fu-jung, "On the Responsibility System of Socialist State Industrial Enterprises," *CCYC*, July, 1962, pp. 15-16, and the discussion on pp. 72-73.

settlement of accounts through the provision of indemnities in case of violation of contract terms.[55]

The responsibility system within an enterprise is an attempt to delineate the various functions to be performed and the assignment of responsibility for specific tasks to individual persons and operating units. The formalized regulations on organization structure are sometimes referred to as "systems and procedures" (*kuei-chang chih-tu*). Although the concept is broad enough to encompass the whole network of relationships between the various positions in an enterprise and those between the position-holders, only the following specific areas of operating responsibility were stressed in the early days of the discussion on the economic accounting system:[56] (1) production responsibility, the fulfillment of the output plans, (2) safety responsibility, the prevention of accidents and the safekeeping and maintenance of plant and equipment, (3) responsibility for quality of outputs, (4) responsibility for the supply of materials and stores. The collective contracts signed between the enterprise and the labor unions are also considered by Chinese writers as a part of the internal responsibility system since they specify the rights and obligations of the parties involved.

5. *Other regulations and operating procedures.* The establishment of various regulations and operating procedures related to (1) the approval by, and report to, superior agencies of the plans and operations of an enterprise, (2) the system of awards and sanctions, including the enterprise bonus fund, (3) personnel policy, (4) asset control, (5) the wage system, (6) the inspection system with respect to production and plan fulfillment, (7) stores control, and (8) statistical reporting system. It is clear that these are attempts to establish proper systems and procedures for the operation of the enterprise. Some of these are designed to stimulate greater effort and efficiency on the part of plant managers and workers.

The "Major Links" of Economic Accounting

After the preparatory steps have been completed, the enterprise is considered ready for the application of economic accounting. The actual measures involved in economic accounting are sometimes referred to as the "major links" (*chung-yao huan-chieh*) of economic accounting.

---

[55] The contract system is viewed by some writers as one of the "major links" in the economic accounting system instead of as a preparatory step. For example, Chi Wu, *op. cit.,* p. 85.

[56] Chi Wu, *op. cit.,* pp. 48-49.

1. Planning. The procedures of planning and the types of plan have been discussed above. As business budgets in a private-enterprise economy, the enterprise plan sets forth the goals of the firm and seeks to organize and coordinate its activities toward the attainment of these goals.

2. Financial and management accounting. Both financial and management accounting are considered to be integral parts of the system of economic accounting. The conception of accounting in mainland China is not different from accepted Western ideas although there is some controversy as to degree of similarity.[57] The accounting process is viewed as being characterized by the continuous, systematic, and comprehensive recording of the activities of an enterprise in terms of money, the summarization and presentation, and the analysis and interpretation of these data. As such, the accounting system serves as (1) a tool of enterprise management, (2) the means for financial control by the state, and (3) a major source of statistical data for national economic planning.

The importance of the accounting system in the control of enterprise operations is widely recognized by Chinese writers,[58] although the effectiveness of such control depends on the availability of accurate and timely reporting of enterprise activities. The introduction of an effective accounting system in state enterprises has involved the installation of a system of original documents, the organization of the books of accounts, the adoption of efficient methods of bookkeeping, and the establishment of regular auditing procedures. The recording process in accounting is sometimes referred to as *"pu-chi ho-suan."*

Two problems in financial accounting have been given special attention in China; these are the organization of the book of accounts and the rules for bookkeeping. The organization of the book of accounts in industrial enterprises has undergone several changes since 1949.[59] The controversy over bookkeeping methods centers about the conventional "double-entry rule" and other bookkeeping methods proposed since 1949, and especially after 1954.[60]

---

[57] See, for example, Tan Hui, "A Discussion of Some Theoretical Problems in Accounting," *CCYC,* February, 1963, pp. 64-67.

[58] See, for example, Tung Chien-sheng, "The Function of Bookkeeping in Enterprise Economic Accounting," *CCYC,* February, 1962, pp. 22-24; Ko Chia-shu "On the Problem of the Interrelationship Between Accounting and Economic Accounting," *CCYC,* May, 1963, pp. 23-31.

[59] Tung Chien-sheng, *op. cit.,* pp. 22-23.

[60] See, for example, Chu Hsin-cheng, "A Discussion of Double-Entry Bookkeeping in Enterprise Accounting," *CCYC,* May, 1963, pp. 32-41.

Among accounting techniques, cost control and what is called the accounting for funds (*tzu-chin ho-suan*) are often considered to be the central parts of enterprise accounting.[61] As conceived by Chinese writers, the idea of cost control encompasses cost accumulation, the determination of costs for products and operations, and cost planning and control.[62] Its ultimate purpose is to reduce costs continually and to provide a basis for evaluating the performance of different enterprises. Moreover, the comparison of enterprise costs is deemed to serve the purpose of stimulating a competitive spirit among the enterprises. The accounting for funds is viewed as being concerned with appraising the effectiveness in the utilization of both working capital and fixed assets.

Following Marxian theory, the value of output is conceived to be comprised of the value created by "living labor" and that transferred from "materialized labor," i.e., raw materials, depreciation, etc., used in production. The value created by living labor, in turn, consists of two parts: wages of workers and profits (including taxes). Cost of production is the sum of wages and general and administration expenses, and value of materialized labor transferred to output. The sales value of factory output is equal to the sum of cost of production and profits (including taxes).

The actual computation of cost of production results from the following steps.[63] Total cost of production for a plant (*tsung cheng pen*) is defined as the sum of factory cost of production, selling expense, and allocated general and administrative expense incurred at the enterprise level. The factory cost of production (*kung-chang cheng-pen*) is equal to the sum of workshop cost of production and factory general and administrative expenses. Workshop cost of production (*che-chien cheng-pen*) consists of (1) direct material, (2) direct labor, (3) fuel and power used directly in production, (4) spoilage and scrap, (5) loss from work stoppage, and (6) other workshop expenses such as salaries and wages of supervisory personnel and depreciation of machinery and equipment. The total wholesale value of output is the sum of total cost of production, planned profits, and taxes. Since selling prices are set by the state, the estimated cost of production obviously must be used in determining such prices. As is the case with Soviet cost accounting (at least until recently), no interest cost on long-term

[61] The Chinese term for cost control is *ch'eng-pen ho-suan* which is usually translated as "cost accounting."
[62] So Chen, "On Enterprise Cost Control," *CCYC,* October, 1962, pp. 36-41, 66.
[63] Chang Chao-chen and Li Po-jan, *op. cit.,* pp. 114-17.

capital provided by the state is included as production cost. The only interest costs reflected in the cost of production of an enterprise are those charged by the state bank on working capital loans. Since 1959, all working capital needs of state enterprises are supplied by the People's Bank and interest is charged on the total amount of working capital.[64]

Three major criteria or indices are used in appraising enterprise cost performance.[65] These are the cost-profit rate, the degree of fulfillment of product cost plan, and the comparison of the costs of production for the same products among different enterprises.

The cost-profit rate is the ratio of total cost of production to profit.[66] The ratio is calculated for individual products or for an enterprise as a whole. Historical trends of the rate, comparisons between actual and planned cost-profit rate, and comparisons of one enterprise with another or with the industry average are made to evaluate the cost performance of an enterprise.

In actual practice, evaluation is made primarily on the basis of the fulfillment of product cost plans. To measure the degree of fulfillment of the cost plans, computations of the rates of decrease in the unit cost of production for similar products over time as well as the reduction in total costs of production are made. The former is called the rate of cost decrease of comparable products. It is intended to serve as a "disaggregation" of the total cost comparisons. For both total cost of production and unit cost, comparisons between planned cost and actual cost are also made. The comparisons are prepared for each cost item as well as for totals.

The various enterprises are allowed to make certain adjustments to the cost data when computations for plan fulfillment are made. For example, the effects of changes in transfer prices set by the state and prices of agricultural products supplied by state trading companies, of revaluation of assets and revision of depreciation rates, and of reclassification of expenses may be eliminated in cost comparisons between different time periods.[67] On the other hand, no adjustment is allowed

---

[64] "Regulations Concerning Several Problems in the Work of the Credit Department of People's Communes and the Liquid Funds of State Enterprises, State Council, December 20, 1958," *Compendium of Laws and Regulations of the People's Republic of China July-December, 1958,* p. 158.

[65] So Chen, *op. cit.,* pp. 37-40.

[66] Ho Chien-chang, Kuei Shih-yung, and Chao Hsiao-min, "On the Contents of Economic Accounting in Socialist Enterprises," *CCYC,* April, 1962, p. 4. These writers consider the cost-profit rate as the primary indicator for cost control.

[67] So Chen, *op. cit.,* p. 42. This article contains a discussion of numerous problems involved in appraising enterprise cost performance.

for the effect on cost from the adoption of new raw materials or accessory materials which reflect technological changes in the productive process. In the comparison of costs for similar products between different enterprises, the costs of raw materials and work in process may be different for an integrated plant in contrast to a nonintegrated one. It has been suggested that, for this purpose, raw materials and work in process in an integrated plant should be uniformly costed on the basis of transfer prices which are the costs of raw materials to the nonintegrated plants. The operating result of each division of an integrated plant can then be compared with that of a corresponding nonintegrated plant.

Clearly the major indicators of cost performance only serve as signals for further managerial action. The specific causes of unsatisfactory performance must be sought in the individual cost items; deviations from cost standards must be analyzed. This process is referred to as "cost analysis" (*cheng-pen fen-hsi*). The causes for cost deviations are classified as (1) "internal" and "external" factors, and (2) quantity and price factors.

3. Management of funds.[68] The management of funds is directed primarily to increasing the rate of turnover of working capital in the enterprise. The inefficiency and waste in the use of working capital is considered to be a major cause of the poor performance of some state enterprises. The measurement of the effectiveness in the utilization of working capital is made by computing the rate of turnover of liquid funds and is computed for total liquid funds as well as for important subcategories of liquid funds. For all liquid funds, the annual rate of turnover is computed by either one of two methods:

1. $$\frac{\text{Proceeds from sale of commodities}}{\text{Average balance of liquid funds}}, \text{ or}$$

2. $$\frac{\text{Total value of output}}{\text{Average balance of liquid funds}}.$$ [69]

The average balance of liquid funds is simply the arithmetic average

[68] The analysis of the effectiveness in the use of working capital and the maintenance of the proper amounts of different categories of working capital are also considered by some writers as part of the "accounting for funds." For example, Li Cheng-jui and Tso Chun-tai, *op. cit.*, pp. 21-22.

[69] Chao Po, "Several Problems on the Analysis of Economic Activities of Industrial Enterprises," *CCYC*, September, 1961. See *JPRS*, No. 15, 828, October 22, 1962, p. 11.

of the beginning balance and the ending balance of liquid funds. The rate of turnover is also measured by the average number of days for each turnover; this is computed as

$$\frac{\text{Average balance of liquid funds}}{\text{Proceeds from sale of commodities}} \times 360 \text{ days.}$$

For control purposes, monthly and quarterly turnover rates are also calculated.

The first step in the program of funds management is the setting of standards for different categories of liquid funds, i.e., the proper amount of working capital to be kept on hand in a given time period. The standards are calculated in what are known as the three stages in the circulation of working capital, namely, (1) inventory stage in the form of raw materials and supplies, (2) the production stage in the form of semiprocessed goods, (3) the circulation stage in the form of finished goods, accounts receivable, and cash.[70] In general, estimates of working capital for inventories of materials are made by first computing the average daily consumption requirements from the output plan and input standards. The number of days of supply to be kept on hand is then determined by giving consideration to delivery time, minimum stock, and other relevant factors. Total inventory to be carried for each type of material is calculated by multiplying the average daily consumption requirement by the number of days of supply desired. This amount multiplied by the unit price gives the value of the inventory to be stocked. This computation is made for each type of material and supply.

The working capital required for goods in process in a given period is computed by the following formula.[71]

$$\text{Total cost of finished goods} \times \text{Ratio of goods in process to total cost of finished goods} \times \frac{\text{Number of days in the production cycle}}{\text{Number of days in the period}}.$$

The production cycle is defined as the time required from the issuance of raw materials to the completion of the finished products. The calculation can best be illustrated by means of a numerical example. Let us assume the production cycle is five days. The cost of

[70] Chang Chao-chen and Li Po-jan, *op. cit.*, p. 145.

[71] *Ibid.*, p. 152. The numerical example that follows is adapted from this work.

daily output of finished goods is Y2,000. The increase in value of goods in process is summarized in the table below.

Production cycle	*Daily increment in value of goods in process*	*Cumulative value of goods in process*
1st day	Y 800	Y 800
2nd day	400	1,200
3rd day	350	1,550
4th day	250	1,800
5th day	200	2,000
Total	Y 2,000	Y 7,350

The ratio of the cost of goods in process to total cost of finished output in the production cycle is computed as

$$\frac{\text{Sum of cumulative values of goods in process}}{\begin{array}{c}\text{Cost of daily output}\\ \text{of finished goods}\end{array} \times \begin{array}{c}\text{Number of days}\\ \text{in production cycle}\end{array}}$$

$$= \frac{\text{Y}7{,}350}{\text{Y}2{,}000 \times 5} = 73.5\%.$$

Suppose the quarterly working capital needs for goods in process is being considered. A quarter is considered to have 90 days. The required working capital is therefore

$$(\text{Y}2{,}000 \times 90) \times \frac{73.5}{100} \times \frac{5}{90} = \text{Y}7{,}350.$$

It can be easily shown that this computation always yields a working capital requirement equal to the sum of the cumulative estimated values of goods in process over the production cycle. In other words, the working capital standard for goods in process established by this method would provide funds equal to the amount estimated to be tied up in semiprocessed goods in a single production cycle.[72]

For finished goods, the working capital standard is computed as

[72] Consider the data assumed below:

Average cost of daily output of finished goods	×	Number of days that elapses from the delivery of the finished goods to the warehouse until collection of proceeds from sale of such goods.

Estimates are also made of prepaid expenses and cash on hand.

The sum of the above items is the total amount of "fixed liquid funds" budgeted for the period in question. This amount is compared with the balance of liquid funds on hand at the beginning of the planning period to determine the excess or insufficiency in liquid funds. Excess funds are required to be paid into the state treasury. Any inadequacy in liquid funds is said to be supplied from three sources: (1) profits of the enterprise, (2) accrued liability for salaries and wages; or (3) budget appropriations.[73] The budgeted amount of

---

[72] (Continued.)

Days in production cycle	*Daily increase in value of goods in process*	*Cumulative value of goods in process*
1	Δx_1	Δx_1
2	Δx_2	$\sum_{i=1}^{2} \Delta x_i$
3	Δx_3	$\sum_{i=1}^{3} \Delta x_i$
.	.	.
.	.	.
.	.	.
n	Δx_n	$\sum_{i=1}^{n} \Delta x_i$
Column Total	$\sum_{i=1}^{n} \Delta x_i$	$\sum_{i=1}^{n} [n-(i-1)]\, \Delta x_i$

The production cycle has a total of n days; the cost of daily output of finished goods is $\sum_{i=1}^{n} \Delta x_i$. Let y be the number of days in the time period for which working-capital needs for goods in process is being estimated. Using the formula given above, we will find that the working capital requirement is

$$y \sum_{i=1}^{n} \Delta x_i \times \frac{\sum_{i=1}^{n} [n-(i-1)]\, \Delta x_i}{n \sum_{i=1}^{n} \Delta x_i} \times \frac{n}{y} = \sum_{i=1}^{n} [n-(i-1)]\, \Delta x,$$

which is the sum of the cumulative values of goods in process over the production cycle.

[73] Chang Chao-chen and Li Po-jan, *op. cit.*, pp. 159-60.

"fixed liquid funds" cannot be changed until the end of the plan period or accounting period. It has already been mentioned that temporary requirements for working capital above this amount are to be financed by short-term bank loans. Such temporary requirements include both seasonal needs and the demand for additional working capital arising from overfulfillment of the output plan. The application for loans must be accompanied by a "short-term credit plan" prepared by the enterprise.

The standards for various categories of liquid funds are intended to serve control purposes in that the sources of excess accumulation of working capital can be identified and actions taken to eliminate such unnecessary accumulations.[74] The next step in the program of funds management is to prepare the plan for increasing the rate of turnover of working capital. A number of ways has been suggested for this purpose:[75] (1) reduction of the inventories of materials and supplies, installation of better materials control and stores accounting, and more effective coordination of materials supply and the production plan, (2) shortening of the production cycle through the use of more efficient techniques and better organization of the production process, (3) strengthening of the sales effort of the enterprise which requires that careful attention be given to market demand, product quality, proper pricing, and the maintenance of adequate factory service for products sold, (4) settlement of accounts through the banks, and (5) the adoption of contracts in both sales and purchases.

4. *Analysis of enterprise economic activity.* The analysis of enterprise economic activities is directed primarily to ascertaining the degree of fulfillment of the enterprise plans.[76] Its objective is said to be the achievement of full and efficient utilization of resources to increase production and capital accumulation. To this end, the analysis seeks (1) to determine the causes for the fulfillment or nonfulfillment of the economic plans of the enterprise to try to improve the management and operation of the enterprise and thereby ensure the fulfillment of

[74] The phenomenon of holding excessive amounts of inventory is attributed by Chinese writers to the misconceptions of enterprise management of its function and responsibility. It is claimed that management personnel commonly views the responsibility of the plant exclusively as one of production without due regard for operating results, and holds the erroneous idea that the output of state enterprises could always be sold or somehow disposed of and consequently neglects completely any selling effort. Chi Wu, *op. cit.*, pp. 79-80.

[75] *Ibid.*, pp. 83-85.

[76] Yen Fang-wen, "Analysis of Enterprise Economic Activity," *Ta-kung Pao*, Peking, June 14, 1960, p. 3, translation in *JPRS*, No. 5175, October 25, 1960; Chao Po, *op. cit.*, Chang Chao-chen and Li Po-jan, *op. cit.*, pp. 264-70.

state plans in the future, (2) to account for the differences in operating efficiency among the enterprises and to seek to raise the performance level of less efficient economic units, and (3) to utilize the results of the implementation of plans in the past as guides in the preparation of new plans.

The analysis of plan fulfillment is made primarily through comparisons between (1) actual results and planned targets, (2) achievements in the current period and those in the preceding period or periods, and (3) one enterprise and others in the same industry or government department.

It is emphasized by Chinese writers that the fulfillment of a production target does not in itself prove that the enterprise is operating efficiently. For example, an enterprise may fulfill or overfulfill its output targets by increasing the number of workers employed above the planned level, which may indicate a decrease in labor productivity. Thus the emphasis is on the comprehensive and coordinated analysis of plan fulfillment and an investigation of the ways that resources are being utilized to fulfill the planned tasks. According to one writer, economic activity analysis meetings were held at various administrative levels so that personnel engaged in different phases of work may pool their knowledge and experience and gain an overall view of the operations of the enterprise.[77]

The analysis of plan execution consists of the following parts:[78]

1. The production plan. Investigation is made of the fulfillment of output targets, quality specifications, and the product mix. Fulfillment of the total output target is measured by the index of gross value of output. The balance in the composition of total output is determined by an inventory, i.e., by ascertaining whether there exists an excessive stock of semifinished or finished goods.

2. The labor and wages plan. The focus of analysis is on deviations of the amount of actual wages from the amount planned, changes in the number of workers employed, and increases or decreases in labor productivity. Labor productivity is measured either by physical output per worker per year or by gross value or net value of output per worker per year.[79] For an enterprise producing a number of products, ob-

[77] Chao Po, *op. cit.*, p. 4.
[78] *Ibid.*, pp. 6-18.
[79] Hsueh Mu-chiao, "On Socialist Economic Accounting," *Hung Chi (Red Flag)*, December 1, 1961, p. 10, translation in *Selections from China Mainland Magazines (SCMM)*, No. 292, December 1, 1961.

viously only the monetary measure can be applied. Attention is drawn to the need of eliminating the effects of fluctuations in raw material prices in calculating labor productivity in terms of value of output.

3. Analysis of the utilization of fixed assets and its effects on the fulfillment of the output plan. The procedures used include the computation of the proportion of idle fixed assets, proper maintenance, and depreciation accounting; this is also considered a part of the accounting for funds.

4. Analysis of the fulfillment of the cost plan. The major indices are the amount and the rate of decrease in cost for comparable products. Comparisons of the actual amount and rate of decrease in cost with the planned amount and rate are also made for major products. This analysis is made for each cost item. Due allowance is given to factors beyond the control of the individual enterprise such as changes in prices set by the state for raw materials, fuels, and transportation. Computations are also made of the quantities of different inputs used per unit of output. The consumption of raw materials is considered by Chinese writers to be of special importance in cost control because of the weight of raw materials in total cost of production of industrial enterprises. For a composite measure of input consumption, computations can only be made in terms of unit cost.

5. Analysis of the financial condition of the enterprise in terms of the fulfillment of the profit and accumulation plan and the rate of turnover of liquid funds. The first step is to determine whether the planned profits, taxes, and depreciation funds have been paid to the state treasury. Since factory wholesale prices are set by the state, the lower the cost of production of an enterprise, the higher would be its profits. The rate of profits is therefore used as a means to measure the economic achievement of an enterprise.

The rate of profit is computed by products and in terms of total output or the total available funds of the enterprise.[80] The rate of profit in terms of total output is simply computed as profits divided by gross value of output. The rate of profits computed for specific products is used by the state to adjust product prices.[81] The rate of profits of funds is defined as the rate of profits in terms of the gross value of output multiplied by the rate of turnover of funds which include both fixed assets and liquid funds. That is,

[80] *Ibid.*, p. 11.
[81] *Loc. cit.*

Rate of profits of funds

$$= \frac{\text{Profits}}{\text{Gross value of output}} \times \frac{\text{Gross value of output}}{\text{Average balance of funds}}$$

$$= \frac{\text{Profits}}{\text{Average balance of funds}}.$$[82]

This ratio is essentially "the return on capital employed" commonly used to evaluate overall management performance in American business.

As an alternative measure of efficiency in funds utilization, the ratio of the value of output to the amount of total capital has been suggested.[83] This is called the output-capital rate. For this computation, the value of output is defined as the value of commodity production which apparently is the value of all currently produced finished goods sold or held in inventory. The total amount of funds is computed as the sum of (1) the total fixed assets less land and other fixed assets not intended for use in production, and (2) the average amount of both "owned" and "borrowed" liquid funds less the average balance in the bank account.

Attempts have also been made to measure the "economic effectiveness of capital investment." This is sometimes referred to as "economic accounting in the process of basic construction."[84] In contrast, the procedures discussed before have been referred to as "economic accounting in the process of production."[85] The measurement of the "economic effectiveness of investment" is clearly directed to the selection of alternative investment projects. A number of methods have been suggested although no unified theory on optimal investment choice has been developed. The variety of different computations has led to the usual advice that calculations must be made in a number of ways and their results compared with one another in order to determine what investment projects are economically preferable under given conditions.[86] Each of the following measures has been discussed in Chinese literature.

1. The productivity of investment in terms of physical output or the value of output. In terms of physical output, this is computed

[82] *Loc. cit.* Such computations are also referred to as "accounting for funds."
[83] Wang Lu-sheng, Liu Nien, Ho Cho, "On Some Problems in the Accounting for Funds in Socialist Enterprises," *CCYC*, June, 1963, pp. 43-46.
[84] Hsueh Mu-chiao, *op. cit.*, p. 12.
[85] *Loc. cit.*
[86] For example, Hsueh Mu-chiao, *op. cit.*, pp. 12-14.

as the amount of investment (funds) required to increase, for example, the capacity to produce 10,000 tons of steel. The idea here is that, all other things being equal, investment projects which require the least cost for a given output capacity are to be preferred over competing projects. The calculations in terms of value of output are

$$\frac{\text{Gross value of annual output}}{\text{Investment in project}} \text{ or } \frac{\text{Net value of annual output}}{\text{Investment in project}}.$$

The supposition is that investment projects which yield higher values of output per given amount of funds should be selected over those which yield lower values.

2. Average rate of return on investment and the payback period. Both of these measures are computed in the same way as in Western practice. The rate of return on investment is defined as the

$$\frac{\text{Annual profits from investment project}}{\text{Cost of investment}}.$$

The payback period is computed as the reciprocal of the rate of return on investment. The source material examined, however, does not distinguish carefully between "accounting profits" and incremental cash flows in the computation of these indices.[87]

3. Comparisons of labor productivity and current operating costs of different investment projects with their respective capital outlays. It is recognized that a project with a higher initial capital outlay may result in lower operating costs while another with lower capital cost may entail higher operating costs. No solution is suggested, however, when such a situation exists.

4. Considerations of length of time required for the completion of a project and the time at which the services of the proposed project will be needed; the proximity of plant sites to the supply of raw materials, power and fuel sources, and prospective markets; the appropriate distribution of plants in different regions; and the existing technological environments. From such considerations, some general conclusions of the pattern of industrial development were derived. It was argued that, because of the low level of technology and the lack of heavy industry in China, both modern methods of production (which involve greater mechanization and automation) and indigenous methods which are more labor-intensive should be utilized in planning

[87] *Ibid.,* p. 12.

for the construction of new plants. Also the scale of plant should not be restricted to large ones; rather, large-, medium-, and small-scale enterprises all should be developed.

CONCLUSION

In the preceding sections the economic accounting system in mainland China was examined briefly. This program of economic accounting can best be characterized as a system of management planning and control in the state enterprises. The economic accounting system is intended to ensure the efficient operation of the state enterprises to achieve the goals set forth in the national economic plan. It involves both planning of the activities of the enterprise based on directives issued by higher authorities and establishing control mechanisms to assure that plans will be fulfilled. If underfulfilled, the control mechanisms would include a method of determining the causes of such failure so that remedial action might be taken. Examination of the Chinese literature on economic accounting indicates that the various measures considered to be parts of the economic accounting system are not mutually exclusive. For example, computation of the rate of cost decrease for comparable products is considered as a part of the program of cost control as well as a part of the analysis of enterprise economic activities; the measurement of efficiency in the use of funds has also been included both as part of the accounting for funds and as a part of the analysis of enterprise economic activities. Changes are probable over time and through variations between industries in the specific measures used in economic accounting work, e.g., the computation of working capital requirements. This survey of Chinese economic accounting has not exhausted all these possibilities. Nor has there been any systematic exploration of how effectively the various measures of economic accounting have been carried out.

Many of the measures for economic accounting, such as physical stock-taking of assets, maintaining adequate records, and improving the rate of utilization of plant and equipment, appear to be elementary. In the setting of an underdeveloped economy, such measures are nevertheless necessary and important. This is supported by the experience with the technical assistance programs of the United Nations. For example, effective control of physical property and the maintenance of proper records of fixed assets and all materials have been found to be most important in a system of management control for industrial

enterprises.[88] Of the other control devices emphasized in Chinese literature, the development of an effective accounting system, budgetary controls, and operations audits have all been found to be essential in light of the experience gained in the United Nations technical assistance program.[89]

The economic system, however, does not provide a satisfactory solution to all problems of economic planning. To the extent that the fulfillment of enterprise plans is considered to be the primary objective of the enterprises, it is clear that the same problems of how best to ensure the efficient implementation of the plans at the enterprise level — a problem which also confronts Soviet planning — would exist in the Chinese setting.[90] First, there is the problem that the enterprises would tend to understate their production possibilities in drawing up the enterprise plan in order to make it easier to accomplish or surpass the planned production tasks. Second, the tendency of avoiding overfulfillment of the planned targets by too much of a margin would also exist in order to forestall any excessive upward revision of the planned tasks by the central authorities in a subsequent year. Third, there is the difficult problem of defining the planned targets in industries producing large varieties of final goods so that distortions and irrationalities are not introduced in the kinds of finished goods produced or in the use of resources. Fourth, the conflict between innovation and the need for smooth and orderly operation in fulfilling the current output plan still remains to be resolved. Fifth, there is the tendency of satisfying only minimum quality standards in order to fulfill quantity targets. The Chinese slogan of "producing as much, as fast, as good and as economically as possible," (*To, Kuai, Hao, Sheng*) which serves as the general guideline for all state enterprises, is quite clearly a reflection of the existence of these problems. The solutions attempted by the Chinese authorities, however, are primarily politically oriented; the appeal has been to the political consciousness of the management and workers of the enterprise, to their pride in national achievement, and to patriotic motivation. No economic mechanisms,

---

[88] See the discussion in George Ronson, "Use of Accounting as an Aid to Management in Industrial Enterprises in Under-developed Countries," *Industrialization and Productivity*, Bulletin No. 1, April, 1958, pp. 56-62.

[89] *Ibid.*, and "Management Controls," *Management of Industrial Enterprises in Under-developed Countries*, New York, UN Department of Economic and Social Affairs, 1958, pp. 29-31.

[90] See the discussion in Alec Nove, "The Problem of 'Success Indicators' in Soviet Industry," in Franklyn D. Holzman, Ed., *Readings on the Soviet Economy*, Chicago, Rand McNally, 1962.

except those embodied in the economic accounting system, have been evolved to deal with the problem that the criteria of performance may operate in ways which induce enterprise management to deviate from economic efficiency and therefore defeat their own purpose. In the controversy over economic accounting in the early 1960's, it has been argued by some Chinese economists that profitability (subject to the condition of all-around fulfillment of assigned tasks) is the best measure of the efficiency of enterprise management in contrast to indices on the quantity and value of output. This is intuitively appealing. But the use of profits as the basic criterion for economic decisions at the enterprise level must be considered in relation to the theory and practice of pricing. If prices set by the central authorities do not reflect underlying scarcity relations of resources (in terms of the priorities established by the central planning authority), the pursuit of maximum profits by the enterprises would lead to misallocation of resources in terms of the requirements of the economy. The measurement of profit would not be economically meaningful if some cases of illogic exist in the price-cost structure. As in Soviet practice, the fixed and liquid capital of an enterprise is entrusted to its custody and use by the state, free of interest charges. The state bank, however, does charge interest on short-term loans extended to finance working capital needs. Thus, except for interest charged on short-term bank loans, interest cost does not enter into the cost of production of a state enterprise. The cost of employing capital would therefore be understated in economic calculations, although it is difficult to assess the significance of this fact in Chinese economic performance.[91]

The discussion on measuring the economic effectiveness of investment projects clearly does not constitute a theory of optimal investment choice at the central planning level.[92] Rather, the various methods appear to be criteria for the selection of alternative projects within the purview of an economic administrative unit such as a ministry or an enterprise, given the investment tasks assigned by the central authority. The limitations of such measures as the "accounting method of rate of return on investment" and the payback period are well-

[91] It is interesting to note that Professor Grossman, in his discussion of the lack of a capital charge in Soviet cost calculations, ventured the guess that the cost of inefficiency resulting from this practice is probably neither excessive nor negligible. See Gregory Grossman, "Scarce Capital and Soviet Doctrine," in Franklyn D. Holzman, *op. cit.*

[92] See "Evaluation of Projects in Centrally Planned Economies," *Industrialization and Productivity,* Bulletin No. 8, 1964, pp. 7-12, for a brief discussion of the methods used in evaluating investment projects in other Soviet bloc countries.

known. But even aside from the problems of the time-value of money capital, the question of the meaningfulness of profitability as a criterion for selecting investment projects remains.

As with everything else in Communist China, there is great emphasis on the "mass line" in the literature on economic accounting. At an operational level, this means the participation of employees and workers in inventory-taking of assets, setting of standards, and formulation of enterprise plans. In spite of the heavy political overtones of such exhortations, to a certain extent they are similar, within the context of communist ideology, to the emphasis given to human relations and motivation in Western business literature.

The Effect of EDP Systems on the Internal Organization of the Firm

BERNHARD HARTMANN*

INTRODUCTION

No other technical innovation has changed so many activities in business administration in so short a time as has the computer. Electronic Data Processing (EDP) is allowing a great extension of man's mental powers; it is also transforming the administrative routines of human organizations.

One characteristic of the computer that makes it unique among all technical implements is that it forces the operator to think how the work can be performed with the greatest precision. Most other devices, even such complicated machines as jet planes or submarines, can be handled through certain routine programs of operation. To apply EDP to business situations, however, requires creative effort for high efficiency.

THE PROBLEM

The current problems relating to EDP may be classified as the following:

1. In the literature dealing with EDP, we find too much reliance on traditional approaches. It is now generally admitted that EDP requires

* Bernhard Hartmann, Professor of Industrial Business Administration at the Technical University of West Berlin, is the author of many books and articles in the areas of accounting and organization theory, electronic data processing, and tax law. He has served as Dean of the Economics Faculty of his university and as a Visiting Professor of Accountancy at the University of Illinois for the spring semester of 1965.

a new system of organization, but no new system has yet been developed in theory.

2. The available literature is characterized by an overemphasis on hardware, programming, and certain limited examples of applications. There is an underemphasis on general creative system design, literally, a lack of theory. EDP must be integrated with the organization structure both in theory and in the actual individual applications of the firm. Thus, both organization theory and information theory need to be augmented by EDP.

The reasons for the current situation seem to be the following:

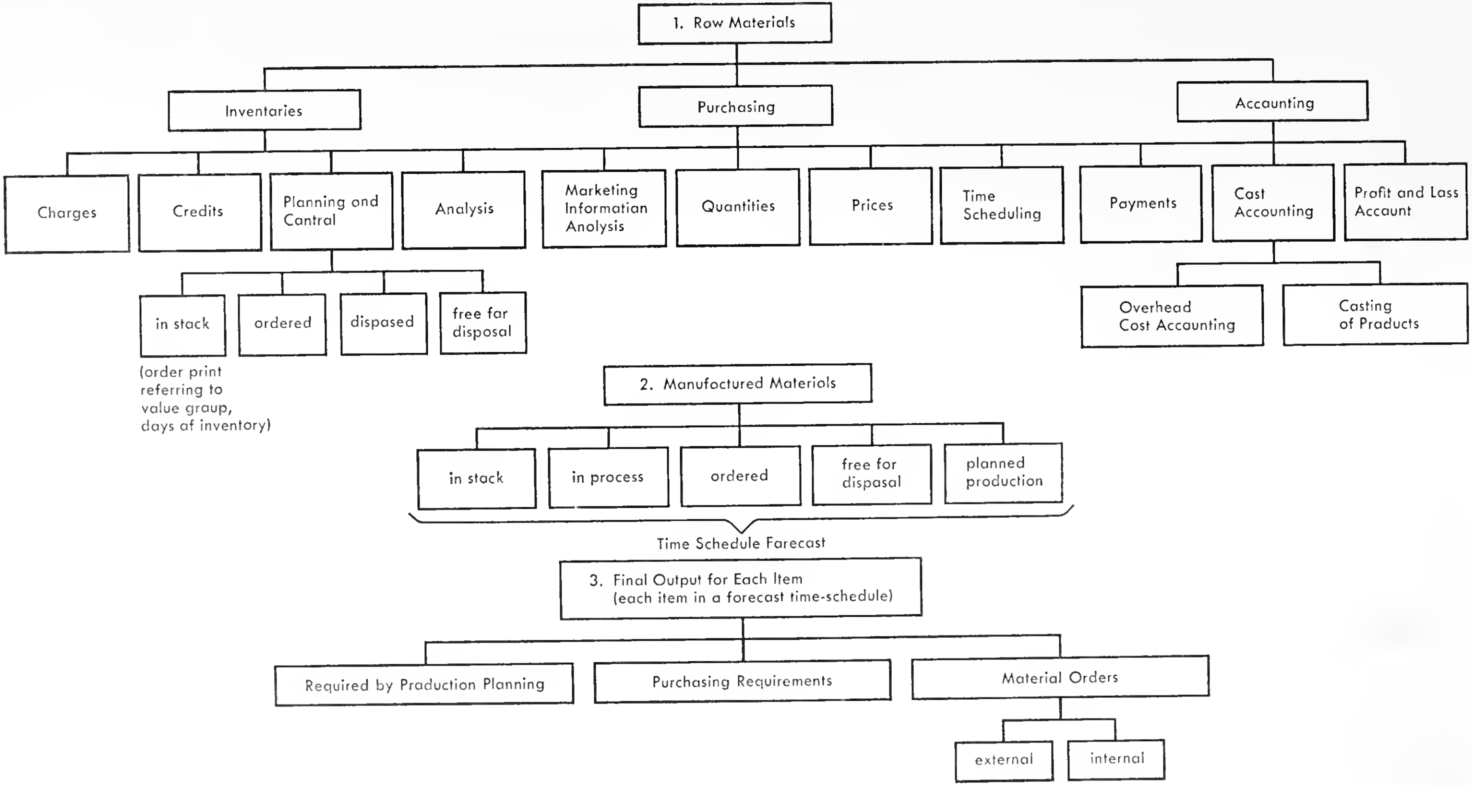
1. Our present business organization structures are related to our past record of industrial development (the so-called First Industrial Revolution), i.e., specialization of labor in the shop was followed by specialization of labor in the administrative departments. The manufacture of a typical product is a complex activity which may be completed by the following steps: (a) division into separate processes such as boring, lathing, and milling (for metal products); (b) arrangement for identical processes to be performed on a certain machine, for instance, a boring, lathing, or a milling machine; and (c) combination of the separate parts into a finished product.

This manufacturing concept was also adapted to administrative activity. Thus, functions were grouped in departments such as accounting, selling, and purchasing. The organization was built around these special functions. The routine work, such as typing, computing, copying, and bookkeeping, was performed with specialized machines in each functional department.

The present stage of development is characterized by the clash between the requirements of EDP technology and the traditional organization system. EDP requires an integrated process of routine work. The organizational criterion of EDP is a data field which is processed in an integrated way, for instance, purchasing is related to inventory, production control, and bookkeeping (liabilities). (See Figure 1.) Sales data are related to inventory control of products, bookkeeping for receivables (aging of receivables), forecasting of production programs, and statistical data for sales analyses.

2. A modern EDP information system must realign the compartmentalized structure of the traditional business organization concerning all routine work.

Figure 1. Example of Data Field for Integrated Processing



CRITERIA FOR APPLYING EDP TO BUSINESS ADMINISTRATION

EDP affects the processing of business information in the following ways:

1. By eliminating many routine functions and by creating new positions for system analysis and design in applying EDP.
2. By making possible improved decision-making by management,
   a. directly, by the use of operations research methods which require EDP for complicated mathematical problems, and
   b. indirectly, by permitting managers to spend less time on data gathering, thus freeing more of their time for evaluating the available information and for creative operational management.

In order to utilize EDP machinery more efficiently, two prerequisites should be realized:

1. Integrated data processing, i.e., a business data system designed as a unit so that data are:
   a. initially recorded at the place of origin,
   b. in a form suitable for subsequent processing without manual interaction or handling, and
   c. in a way that all output data required will be produced in a unified sequence of steps. To achieve integrated data processing, system analysis and design must be performed individually for each firm.
2. A management information system may be defined as a data processing system designed to supply management (top and middle management, supervisory personnel) with information of business data that are new, accurate, and timely. Generating redundant data should be avoided, although the cost of additional redundancy of data processing is relatively inexpensive, but the handling, reading, and analyzing of excessive records often are costly.

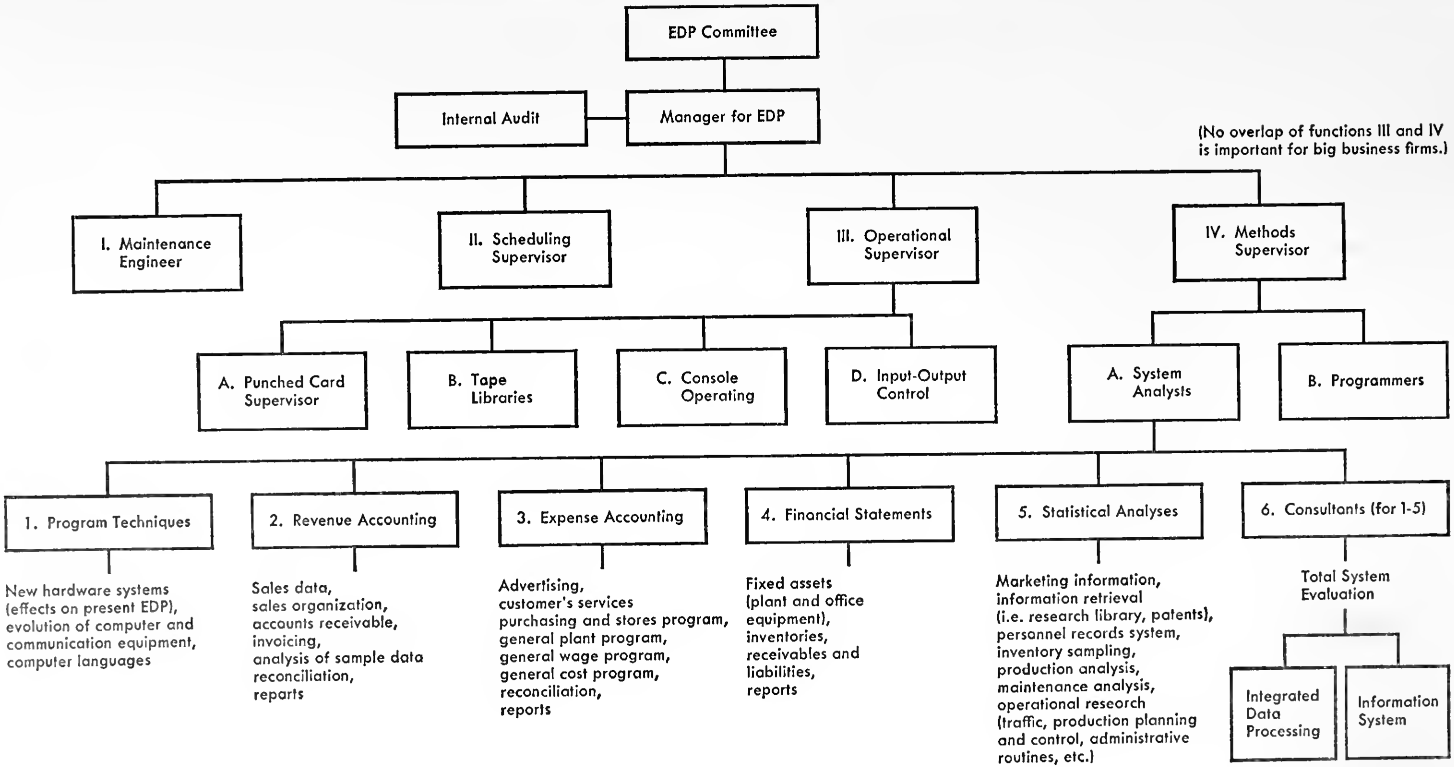
ORGANIZATIONAL CHANGES

I. Survey

The conditions mentioned above affect the traditional firm's organizational structure in certain areas:

1. The EDP department and the systems department. The latter should prepare new and improved EDP applications, and should design an optimized organization chart adapted to the need of the individual firm. The systems section designs data areas which will be processed simultaneously (integrated processing). (See Figure 2.)

Figure 2. Organization of EDP Department



2. The optimal place of the computer and systems department in the organization chart. (See Figure 2.)
3. The organizational structure of non-computer departments.
4. The information system (flow of output data and records). The relationship of a computer system and an information system may be seen in Figure 1.

An EDP department is not a service tool designed to perform certain individual tasks of certain departments, but rather it is an efficient overall control mechanism. All of the various functional controls should be welded into a single operational control system for the entire firm. As a result, it will often be necessary to change the existing organization structure, especially in middle and lower management. Some of the departments will be upgraded but most will be downgraded.

The goal of EDP in the firm should be to establish an efficient organization to direct all the data processing facilities in order to achieve the most efficient information system. The general effects the introduction of such a data processing system will produce are:

1. The removal of routine work necessary for EDP operations from administrative departments.
2. The introduction of a new organizational element to develop coordination and planning.

II. Effects of Integrated Business Systems

1. The system. Little theoretical work has been done as yet in the study of integrated business systems and total business systems with computers, although both systems are partially operational in some large business firms. Integration requires that each part of the administrative system be developed in full recognition of the capabilities and requirements of other parts. Integration in this sense implies the development of the communication system of transactions. When a transaction or event occurs, it should be recorded, and the record should be either communicated or stored. There are two possible steps to realizing this:

1. Combining (in most cases).

$$\left.\begin{array}{l}\text{event} \longrightarrow \text{record} \longrightarrow \text{information flow}\\ \text{storage of information} \rightarrow \text{information flow}\end{array}\right\}\text{processing} \longrightarrow \text{report}$$

2. Branching.

$$\text{report} \rightarrow \text{information analysis} \rightarrow \text{decision}\left\{\begin{array}{l}\text{Choice 1.} \longrightarrow \text{event}\\ \text{Choice 2.} \longrightarrow \text{event}\\ \text{Choice 3.} \longrightarrow \text{event}\\ \text{Choice 4.} \longrightarrow \text{event}\\ \text{etc.}\end{array}\right.$$

(This second step makes the choice between alternative programs dependent upon the occurrence of a new event.)

The two steps above are often combined; the sequence is, of course, (2) after (1). These steps include three information activities: information flow (direct transfer), information processing (report combining), and information analysis (decision branching).

Considering these fundamental relationships together with computer techniques, the traditional data systems of firms must often be changed. Conversion requires modification of existing procedures. In large firms, many administrative departments of branch plants (divisions) use different forms of data handling and reporting. They should be made uniform. Economically, all redundancies should be eliminated to save costs of handling, transmission, and interpretation.

A truly integrated information system for the entire firm cannot yet be achieved. As of now, mathematical models have been developed which describe only the fundamentals of the basic flow of data, reports, and orders.

2. *Influences on Organizational Structure: General Aspects.* An integrated business system tends to upset the two basically different types of corporate organizations, the functional and the divisional ones (this only concerns the information system and routine work, and not, as yet, the main functions of the firm such as selling, manufacturing, or purchasing). Both systems are commonly encountered, the functional in every firm and the divisional with increasing importance in bigger firms.

The significance of the functional organization will decrease the number of separate lines of reporting through various levels to an executive who is responsible for a function such as purchasing, manufacturing, selling, or accounting. The work of supervising and interpreting reports can often be replaced by mechanical screening and exception reporting, thus achieving management by exception which is more efficient and less expensive than traditional methods. In this way, the centralization of administrative functions will be advanced, even in divisionally organized firms. Data integration allows centralized integration of divisional planning and divisional decision-making. Many functions of lower management in a divisional organization may be reduced or eliminated.

The changes in organization structure can quite obviously be implemented only by top management or by a committee which is responsible only to the president. Before EDP, the organization of a firm could be continuously adapted to the growth of the firm. The intro-

duction of EDP techniques, however, requires revolutionary changes in the organization. The new functional information control should be in the hands of a top management official, possibly an assistant controller. Many routine decisions and supervisory tasks, as a consequence, should be eliminated on lower managerial levels.

3. Consequences (Description). The following steps are involved in such a reorganization:

1. Removing all administratively routine work from departments and concentrating them in EDP departments.
2. Either (a) eliminating sub-departments in the former organizational scheme, or (b) reducing them to unavoidable interaction work or individual decision-making.
3. Adapting the organizational pattern to the deleted or reduced departments by (a) simplifying organizational structure and communication network, and (b) downgrading of reduced departments. (See Figure 4)

4. The Place of EDP in the Organization Chart. A first rule of organization is that each manager control a certain number of staff assigned to him, and he in turn report to a single authority above him. Organization charts usually have a pyramid-like structure with authority and responsibility flowing upwards into fewer and fewer hands. Because of EDP a new type of organization chart must be developed.

In approaching the problem, the following considerations seem important.

1. EDP implies the inevitable concentration of data processing which will cause a centralization of those management departments connected with the data. This concentration occurs because computers are expensive and should be fully utilized. Since one computer can do the work of many departments, in most cases it would not be wise to install a computer in each department.

The computer, by its nature, encourages centralization. It can absorb work from other departments. Workers, on the other hand, tend to be more efficient when working in smaller groups. A balance between the principles of the effects of centralization and decentralization should be established for the individual firm.

2. Departments concerned with data processing will tend to become separate, functional business units. These functional units have the characteristics of a service department in relation to the firm as a

whole. On the other hand, EDP is not a servicing device for individual tasks of other departments; EDP, properly applied, is a system embracing all business applications.

3. The EDP department is normally staffed by highly skilled personnel who naturally tend to become independent of all other departments, even from top management. Not all managers will master the intricacies of EDP. The necessary skills of the EDP staff (which are required for the more sophisticated tasks of EDP) cause a marked division from those departments performing the routine work of preparing documents and collecting data. Thus the staff of an EDP department will be upgraded, and the staff outside that department, busy with subordinate and routine work, will be downgraded in the organization chart.

4. Many departments in the areas of routine work will be reduced in size and their managers downgraded.

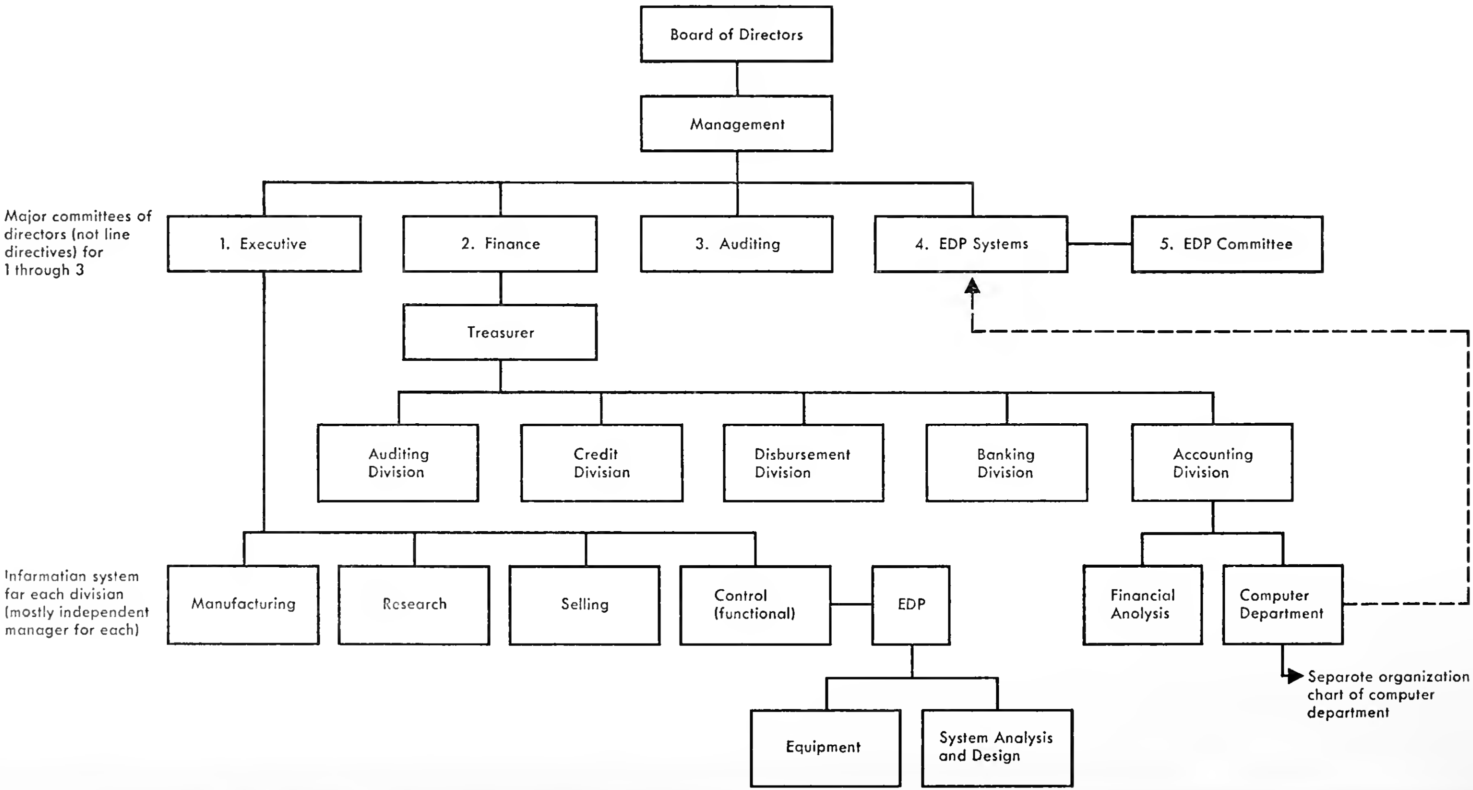
5. The position of the EDP department in the organization chart is not determined by the organizational element which today makes the greatest use of the computer (i.e., accounting), but rather by other departments (operations research, production control, and research and development) who certainly will become major users of computers.

In the final analysis, the EDP department tends to fall into the hands of staff specialists. These specialists often have too much responsibility for information systems and operating managers too little. In the first EDP business applications, it was inevitable that specialists would gain a dominant role in developing EDP departments. A manager supervising an EDP department is tempted to give top priority to the processing of his department's own work. Moreover, if the computer remains in a certain department, resentment from other departments will normally develop. A separate EDP department with full authority to provide all-around service is advisable. Thus, EDP affects the organization of the entire firm, and it can lead to improvements in the organization scheme.

6. An EDP Committee should be the supreme authority on EDP matters. The normal members of such a committee are the EDP manager and the heads of those departments frequently using the computer. The committee authorizes (a) the planning of the initial and additional EDP installations, and (b) the planning of new applications — decisions of what, how, and when. (See Figure 3.)

5. *The Position of the EDP Manager in the Organization Chart.* EDP creates a new function under the management of a vice president

Figure 3. EDP in Organization Chart



or head reporting directly (preferably) to the chief executive officer. The titles suggested for this position have been (1) vice president of administrative services, or (2) vice president of information systems.

The authority of the head of the EDP department should extend to the highest corporate level. In this way, he will be better able to discover what management's goals are and to develop the EDP system in harmony with these goals. He should be deeply involved in long-range planning as well as in the daily information function. To optimize the system, the EDP manager must decide what information is desired and how and to whom it must be transmitted.

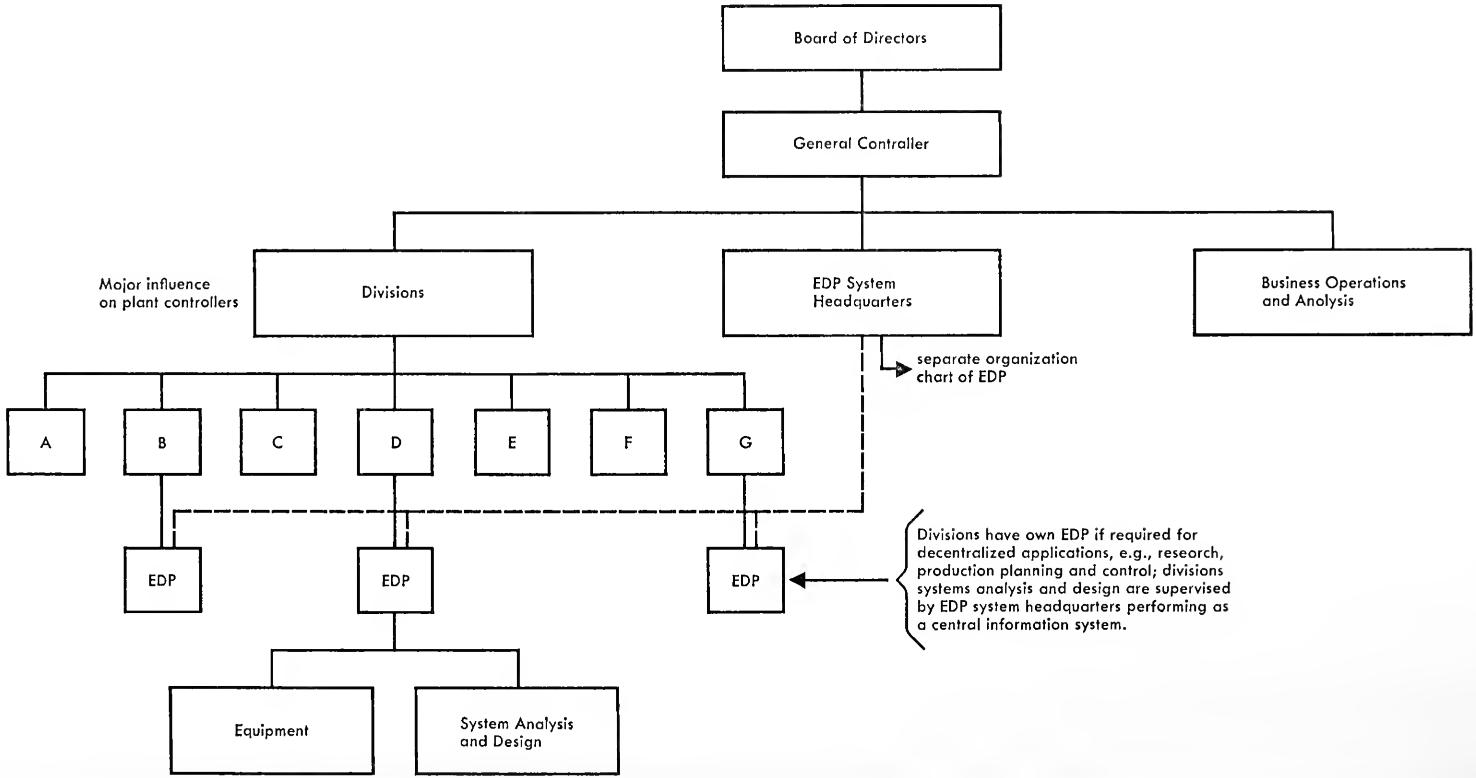
The general goal of information system design is to realize improvements either by reducing costs of information gathering or by raising the quality of information that is collected.

6. *Place of EDP in a Decentralized Organizational Structure.* The general managers of industrial divisions rank highest in individual responsibility. They often perform independently as presidents of a firm. The firm's executive committee often gives only broad directions.

Each division needs its own process control and process development computers for production and also for research work. (See Figure 4.) This enables each division to compile daily sales totals and current operating data which can be evaluated by the company's main EDP center. The fact that many divisions are separated geographically does not hinder the operation of a main EDP center because off-line communication equipment can periodically transmit the regularly compiled data. Communication equipment available for such purposes ranges from teletype and telephone lines to regular mail service. The main data storage devices for this purpose are magnetic tapes and disks, paper tape, and punched cards. The use of particular equipment and storage devices depends entirely upon the attendant circumstances of individual situations. Also in a decentralized organizational structure (primarily in large firms with several industrial branches), the principle of centralization should be realized (See Figure 3). An overemphasis on decentralization can create some disadvantages.

An integrated information system applied to an entire firm can be introduced only by education and suggestion. Methods-section personnel necessarily must work in the decentralized divisions and their individual wishes for information may be overemphasized. In certain cases this system may work but usually imperfectly because of two contrary goals, those of (1) unification and simplification through cen-

Figure 4. EDP in Organization Chart (controlling aspect)



tralization and (2) individual applications in divisions supporting decentralization.

The advantages of centralization are:

1. Lower expenses because the computers are operating more economically, especially with multiprocessing.

2. Reduction of reports. Even if divisions are charged with all costs for system analysis and design, programming work, and computer operating time, division managers often request too much individual and redundant information.

Thus, top management should decide: (a) whether a new data processing application is necessary for the benefit of the firm or, rather, for the personal benefit of an individual manager, as is the case of prestige reports or of reports prepared with unnecessary speed, (b) how detailed the reports should be, and (c) who should receive the reports (an evaluation of costs and the corresponding benefit of having the reports).

3. Easier review for central supervision of operations. Decentralization (computers located outside) must remain for engineering goals, especially research work, process planning, and process control.

The connection between geographically separated divisions and the computer department can be handled in two ways:

1. Daily teletyping of the most important results for selling, production, and shipping (inventory totals are stored in the computer department during the last working hour).

2. Daily shipping of prepared work. In a large firm there are partial data systems referring to the sales market and production procedure of the industrial branches. The shipped materials are: punched paper tape (e.g., punched by invoice machines), punched cards, or magnetic tapes arriving each morning at the beginning of regular office hours. Even in a decentralized organization, EDP and the information system can be centralized.

III. Effects of Total Business Systems

Cybernetics. The principles of cybernetics may be partially realized in total business systems, and they are already in use in some firms in the United States.

Norbert Wiener's question adapted to business management is: how

can a firm automatically control itself as an organism and how can it adapt itself successfully to its external environments?[1]

The basic idea of cybernetics is realized by automatic manufacturing machines (for example, automated assembly lines of automobile firms or automatic production controls in the chemical industry) which incorporate some of the characteristics of a living organism, that is, to adapt and adjust themselves. In the technical fields, the idea of "feedback" has been realized for many years.

Concerning business management, cybernetics is an idea which may be illustrated by a model which usually is mathematically designed. Cyberneticists claim that the deterministic type of approach has limited degrees of success. The business organization is similar to a natural organism characterized by complexity. It cannot be planned and controlled in a deterministic way. The relationships among the various parts of the business are so complicated that one cannot control all factors. Indeed, control is restricted by the feasibility of methods which can be easily and economically handled. What is needed is to determine a relatively economical method of work which guarantees a relative maximum efficiency concerning control and improvement of the firm.

This system of control is characterized by the attempt to code all of the many events which take place within the business function together with the recollection of all those events from the storage medium (magnetic drum, core, or disk). In this manner, information on the condition of the firm is continuously available.

The information flow can originate both from organization structure and management. Previously each level of the management pyramid collected data from a lowel level and, after consolidation and selection, passed them on to the next level. EDP does not require human interaction. The results (output) are designed to provide the bases for management decisions and actions. Routine decisions may be processed by the computer.

As more routine decisions are processed by the computer, the more obvious becomes the gap between those who decide or set criteria for decision-making and those in charge of lower, routine operations, such as stock-ordering, time-scheduling and checking in the purchasing department, rejection of credit applications in the selling department, maintenance rosters in the work shops, or deferring work on one job

[1] Wiener, Norbert. *The Human Use of Human Beings, Cybernetics and Society.* Doubleday and Company, Inc., New York, 1954, Chapter 1.

and accelerating work on another (PERT-system). Decision-making by computer-processed operations research techniques is increasing immensely.

On the other hand, as the work in managerial departments becomes more sophisticated, there will be more emphasis on analysis and planning.

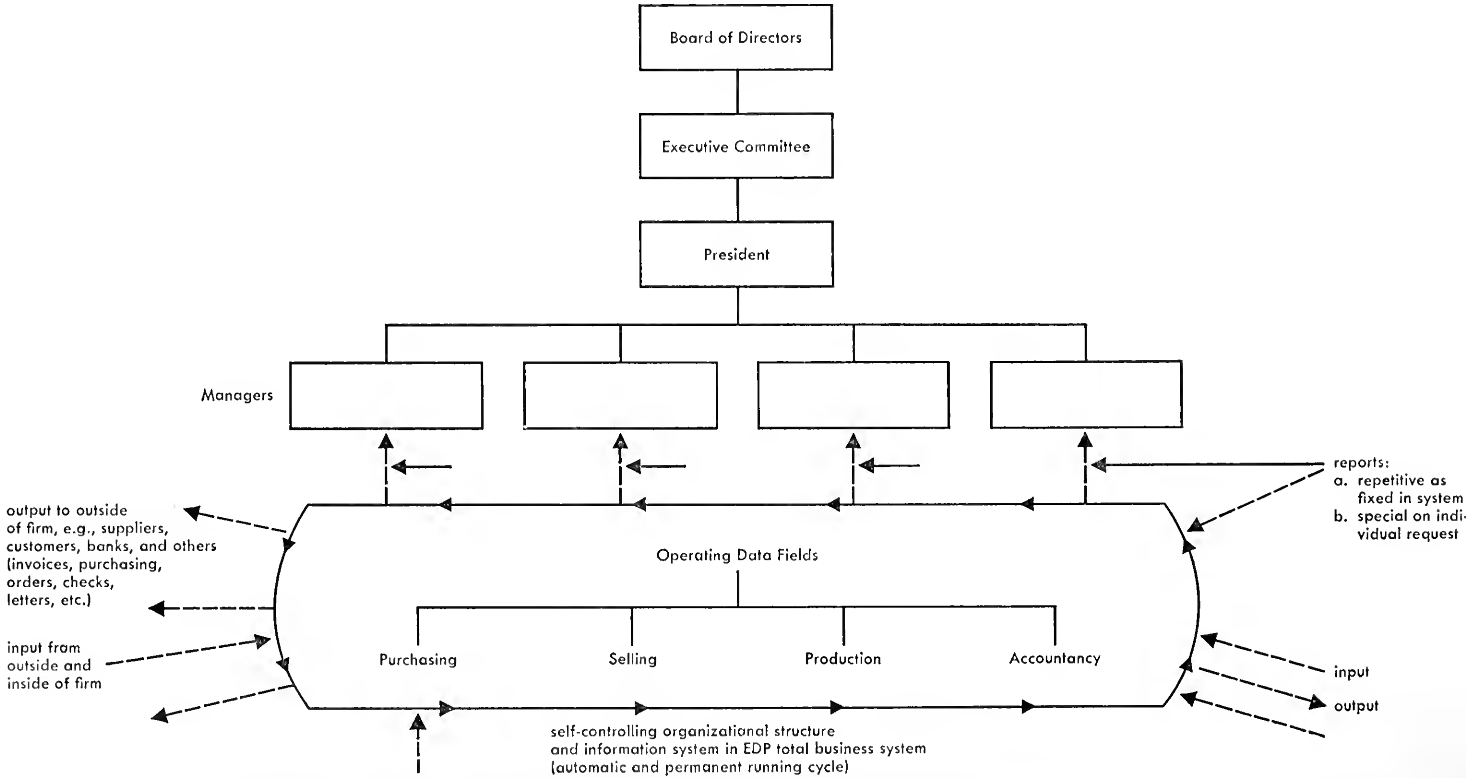
Application. The following example of a part of a total business system is already in operation in some firms: integrated data processing for sales (including invoices), receivables, sales analysis, financial planning. Nearly complete total systems for production control and cost accounting are also in use by some firms (with thousands of products and complicated final units, such as airplanes).

If all groups of data in a firm are considered, the organizational structure will have the following criteria:

1. The routine work of all administrative departments is performed by the computer and automatically checked; it no longer needs supervision.
2. Supervision can be restricted to exceptional cases needing manual handling because computer costs would be economically prohibitive to cover all possibilities.
3. The particular organizational structure of the individual firm has become rather meaningless. More important is the checking of the employees of each department as to quality and quantity by a personnel supervisor. Also, for top-management level, the organization chart is obsolete because managers know their functions when first beginning their particular job, such as purchasing, market analysis, production, or selling.

   The organization chart will no longer be needed except for the orientation of new staff and visitors (see Figure 5). Top management can restrict itself to management policy and planning and decision-making supported by analysis reports from the EDP department.
4. Organization charts can be restricted to certain departments performing highly skilled intellectual or creative work, e.g., research and product development, EDP (see Figure 2). The information system will also be reduced, characteristically in the following areas:
   a. The information system for all administrative routine work is fixed in an EDP total business system,
   b. Reports to managements are reduced to: certain exception cases, referring to an information scheme in the EDP system; repetitive

Figure 5. Organizational Structure of EDP Total Business System



final results, e.g., the profit and loss account or an analysis of sales programmed in the EDP system; and specifically requested data or reports for decision-making.

The new, simplified organizational structure and information system are demonstrated in Figure 5. The organization structure and information system are replaced by a fully integrated EDP system, also called a total business system. In other words, the organizational structure and the information system are built into the EDP system by the system analysts and designers; this new structure is not made considering traditional organizational structures but rather is based on computer techniques.

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING OF THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION
PAUL M. GREEN, Dean

The Center for International Education and Research in Accounting was established to foster the international development of education and research in the accounting discipline, to provide a base for the international exchange of ideas and materials relating to accounting education, to encourage and assist both accounting faculty personnel and students from other countries to come to the University of Illinois for study and research in accounting, and to provide faculty members for assignment to universities in other countries.

The Center, functionally and administratively, is a constituent part of the Department of Accountancy and the College of Commerce and Business Administration of the University of Illinois. The graduate training of a substantial number of international students has been an important activity of the Department for many years.

One of the specific goals of the Center is the publication of reports, booklets, and monographs which further the cause of advanced education and research in accounting.

V. K. Zimmerman, *Director*

OTHER PUBLICATIONS OF THE CENTER

Two new monographs of general importance to the international aspects of accounting have just been completed and are now available.

THEORY OF ACCOUNTS IN DOUBLE-ENTRY BOOKKEEPING
by Professor Karl Käfer (84 pages)........................$2.00

THE EVOLUTION OF DIRECT COSTING
by Professor Charles Weber (128 pages)......................$2.00

In addition, the following publications of the Center are still available.

INTERNATIONAL CONFERENCE ON ACCOUNTING EDUCATION
(Proceedings) (138 pages)..................................$1.00

A STATEMENT OF BASIC ACCOUNTING POSTULATES AND PRINCIPLES
by a Study Group at the University of Illinois (32 pages)........$1.00